

APPLIED SCIENCE READING ROOM

THE

# Country GUIDE

In This Issue . . .

- Tree Farmer Hoyt
- Crossbreds Today
- Finery with a Flair

CANADA'S NATIONAL RURAL MONTH

UNIVERSITY OF ALBERTA  
EDMONTON ALTA S5T  
61 1005-026



FEBRUARY  
1961

15¢

# *Creativity* in the kitchen rewards you at your table

Your family smiles approval . . . and you know the meal is a success! The careful selection of ingredients, the preparation, the thought that went into it were all worthwhile.

That's the way our research people feel when they develop a new product or manufacturing process. It often takes months of painstaking work—measuring and blending different ingredients, testing at extreme temperatures—before they're satisfied with the results. This kind of skill and care in *our* kitchen enables

us to live up to the "CP" mark—Canada Packers' pledge of finest quality—so that you and your family can enjoy "good things to eat."

It takes no time at all to create an elegant air about every one of your meals. Serve delicious Maple Leaf bacon and tasty sausage in your best silver dish. Bring sausage and eggs to the table Continental style—in the skillet. And just to be different, put Maple Leaf bacon strips and a poached egg on toast, top with a sauce of Maple Leaf cheese, and voilà—Eggs à la Benedict!

GOOD  
THINGS  
TO EAT  
COME IN



PACKAGES



CANADA  PACKERS  
PLEDGE OF FINEST QUALITY

All delicious! All by Maple Leaf! Sweet-smoked bacon, pure pork sausage, farm-fresh eggs.

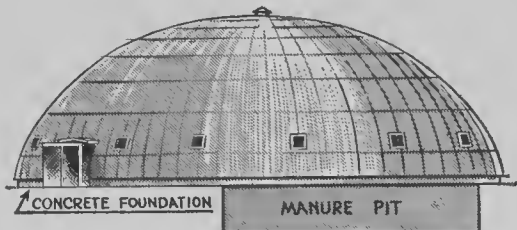


# THE Country GUIDE

Incorporating The Nor'-West Farmer and Farm and Home  
CANADA'S NATIONAL RURAL MONTHLY

## In This Issue

- **PROTECT YOUR SEED** against disease and insects before it goes into the ground. The main points of chemical treatment for cereal and flax seed are given on page 17.



- **PIG DOME** (above) starts little pigs in the middle and provides bigger pens in wider circles as they grow. Cliff Faulknor tells about the Froese brothers' geodesic barn on page 13.

**OLD STONE SCHOOL** was given a new role in the community by Mr. and Mrs. E. V. Thompson of Guelph County, Ont. See page 67.

## Features

The Man Who Made Trees Grow—by Don Baron	11
Dairy Farmers Want Emergency Help—by Lorne Hurd	12
Their Home is a Dome—by Cliff Faulknor	13
Crossbreds in Today's Farming—by Dr. W. E. Howell	14
Guide to Seed Treatments—by Richard Cobb	17
Putting Puss Outside—by Eric Wahleen	18

## Short Features

Death of a Predator	16	Fertilizer Returns Dollars and Cents	47
Their Farm North of the Peace	19	Joint Effort to Improve the Saskatoon	50
Through Field and Wood	22	Right Bird for the Job	52
Organized Crossbreeding	28	Cheap Way to Build a Bulldozer	54
How Long Antibiotics Stay	33	Permanent Potato Storage	58
Campaign Promotes New Seed Grade	34	Rural Route Letter	82
Shelterbelts Pay Big Dividends	35	The Tillers	82
Pasture Champion 40-Acre Dairyman	45	Planning Proved to be Good Business	82

## News and Views

Weather Forecast	4	What's Happening	7
Editorials	6	Farm Organizations	77
Guideposts	7	Letters	79

## Farm Practice

Livestock	24	Poultry	52
Dairying	33	Farm Mechanics	54
Soils and Crops	34	Farm Buildings	57
Workshop	45	What's New	60
Horticulture	49		

## Fiction

It's Still A Gentleman's Game — by Marian Williams	62
--	----

## Home and Family

February Fancy — by Elva Fletcher	65
Imagine! Apartments in a Schoolhouse — by Gwen Leslie	67
Childhood Days	68
Fashion Forecast: Signs of Spring	69
A One-Man Medical Plan — by Richard Cobb	74
Making a Puppet Box — by Lorrie McLaughlin	75

Handicrafts	66	We Eat with Our Eyes	73
Sociable Security	70	In the Looking Glass	75
Gathered or Pleated (patterns)	71	Boy and Girl	76
Crispy Fried Foods	72	Young People	76

**COVER:** In rolling Ontario country, cattle wend their way down a brown ribbon of road between snowy banks and fields.—Don Smith photo.

Editor: LORNE HURD  
Associate Editor: RICHARD COBB  
Field Editors:  
CLIFF FAULKNOR, Western Canada  
DON BARON, Eastern Canada  
Home and Family Section:  
Associate Editors:  
ELVA FLETCHER  
GWEN LESLIE

Contents of this publication are copyrighted and may only be reproduced with the permission of the editor.

Printed and published by The Public Press Ltd. President: J. E. BROWNLEE, Q.C.  
Publisher and Managing Director: R. C. BROWN  
Circulation Manager: G. B. WALLACE  
Business Manager: J. S. KYLE  
Advertising Manager: R. J. HORTON

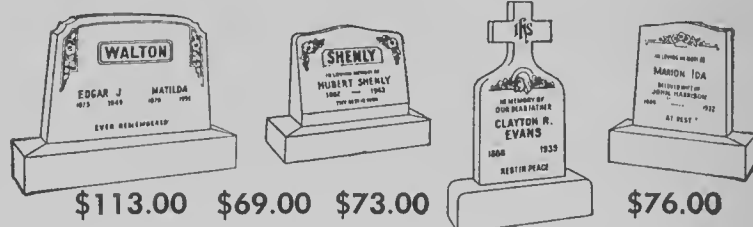
Subscription rate in Canada—50¢ one year, \$1 two years, \$2 five years, \$3 eight years.  
Outside Canada—\$1 per year. Single copies 15¢. Authorized as second class mail, Post Office Department, Ottawa. Postmasters return Forms 29B and 67B to:

1760 Ellice Avenue, Winnipeg 21, Manitoba.

Serving Canadian Farmers Since 1882



Save up to 20%...by ordering  
a Memorial now during  
**LONS WINTER SALE**



In order to keep our staff of skilled craftsmen busy during the winter months, Lons offer their Nationally Approved Lonite and Granite Memorials at Specially Reduced Winter Prices. A small deposit will hold your order for Spring delivery...no charge for storage.



## MAIL THIS COUPON TODAY!

**LONS STONE WORKS LIMITED**  
Box 230, Norwood P.O., Winnipeg, Man.  
or Box 210, Belleville, Ont.

Please send your **FREE 32 page**  
Memorial Catalogue.

Name \_\_\_\_\_

Address \_\_\_\_\_

**LONS STONE WORKS**  
LIMITED  
GRANITE MARBLE LONITE

*All the water you want  
when you want it!*

**ARMSTRONG  
PRESSURE  
SYSTEMS**

*for the modern farm*



by Canada's largest manufacturers of centrifugal pumps

For year-round, trouble-free performance at low cost, install the amazing Armstrong Pressure System. Outpumps any other comparable system; is almost noiseless in use; and can be converted from shallow to deep well

operation. Models to suit every requirement: 2- or 12-gallon packaged systems, or vertical tank systems from 10 to 120 gallons. Buy Canadian, for Canadian conditions!

Service depots from coast to coast.

**FREE**

your copy of  
this illustrated  
booklet on  
Armstrong  
economy  
pressure  
systems.



To: **S. A. ARMSTRONG LIMITED**  
1400 O'Connor Drive  
Toronto 16, Ontario

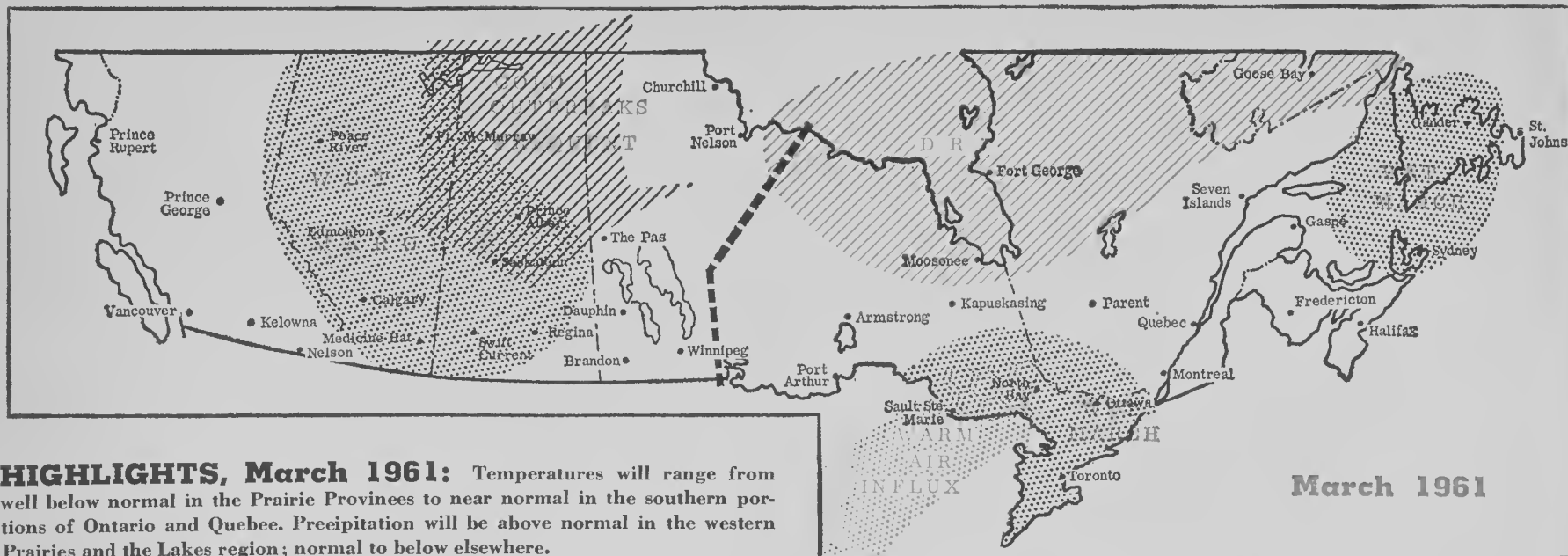
I am interested in receiving my **FREE** COPY of booklet on **ARMSTRONG WATER PRESSURE SYSTEMS**, and the name of my local Armstrong Representative.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

TOWN \_\_\_\_\_ PROV. \_\_\_\_\_

Prepared by DR. IRVING P. KRICK and Associates



**HIGHLIGHTS, March 1961:** Temperatures will range from well below normal in the Prairie Provinces to near normal in the southern portions of Ontario and Quebec. Precipitation will be above normal in the western Prairies and the Lakes region; normal to below elsewhere.

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—ed.)

### Alberta



- 1st week 1-4:** Unsettled and chilly 1st and 2nd, becoming mild over week end. Cloudy and unsettled along mountains 1st and 2nd, and in extreme north about 4th.
- 2nd week 5-11:** It will be turning cold early in the week and continuing generally cold into the week end. Threat of snow will develop about 9th.
- 3rd week 12-18:** Briefly milder around the 14th, but otherwise it should be mostly cold through the week. Threat of snow 14th, particularly in southern sections.
- 4th week 19-25:** Temperatures will be moderating by the 20th, and then turning colder again on 24th and 25th. Stormy and windy conditions the 22nd and 23rd.
- 5th week 26-31:** Coldest weather is expected at the beginning of the week and again about the 31st. Unsettled in the southern sections 27th and 28th.

### Saskatchewan



- 1st week 1-4:** The month will begin on a cold note with some warming expected after 3rd. It will be windy and snowy in northern sections about 4th.
- 2nd week 5-11:** The coldest conditions are expected to occur during the early part of the week. Snow will occur between 9th and 11th.
- 3rd week 12-18:** Most of week will be cold and generally storm free. There will be a threat of snow near United States border on the 16th and 17th.
- 4th week 19-25:** A warming trend will begin about 20th, with no extremely cold weather during balance of the week. Light snow is in prospect about 23rd.
- 5th week 26-31:** Mostly fair weather can be expected during this week. It will turn colder for first day or two with a warming trend about 30th or 31st.

### Manitoba



- 1st week 1-4:** It will be cold, but generally fair weather will mark this interval with a warming trend expected to set in on the 4th.
- 2nd week 5-11:** Mild weather during early part of week will give way to light snow and briefly colder conditions about 7th. Snow likely again near 11th.
- 3rd week 12-18:** Snow into the 12th, followed by lowering temperatures. Chilly weather continuing to 16th, with storminess expected in south 16th and 17th.
- 4th week 19-25:** A warming trend about 21st. No unusually cold or stormy weather in prospect for balance of week with only light snow on 24th-25th.
- 5th week 26-31:** It will be turning colder on 26th with temperatures moderating again about 29th. Threat of light snow 30th or 31st, particularly in south.

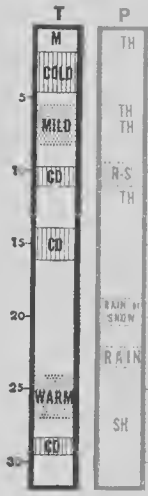
TH=Threatening

### Ontario



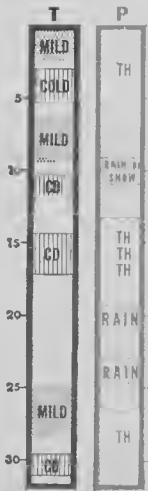
- 1st week 1-4:** Light snow is expected on 1st. Colder air will move into western sections on 1st, gradually overspreading the province by 2nd.
- 2nd week 5-11:** Mild weather around 6th and 7th. Snowy and windy between 7th and 9th, then more cold air will spread into province on 10th and 11th.
- 3rd week 12-18:** Coldest conditions near mid-week, with warming expected near week end. Storminess will move through Lakes region on 17th and 18th.
- 4th week 19-25:** Snow is in prospect near the 21st, improving the 22nd. No unusually cold weather is expected during the week—becoming warm by week end.
- 5th week 26-31:** You can expect fair and mild weather to highlight the interval with only a few showers indicated near the 27th and 29th.

### Quebec



- 1st week 1-4:** It will be unsettled on the 1st, but mostly cold and fair weather is expected during the remainder of the period.
- 2nd week 5-11:** Rising temperatures on 5th, becoming mild into mid-week. Much of week unsettled, with storminess and chilly weather moving in on 10th and 11th.
- 3rd week 12-18:** Favorable outdoor working conditions are in prospect during most of the week. Coldest conditions are expected around the 14th-15th period.
- 4th week 19-25:** Blustery, windy conditions can be expected during first day or two and again near 22nd. No extreme temperatures—warmest near end of week.
- 5th week 26-31:** Warm, fair weather will rule during early part of week. There is chance of a few showers on 28th, turning briefly colder 29th.

### Atlantic Provinces



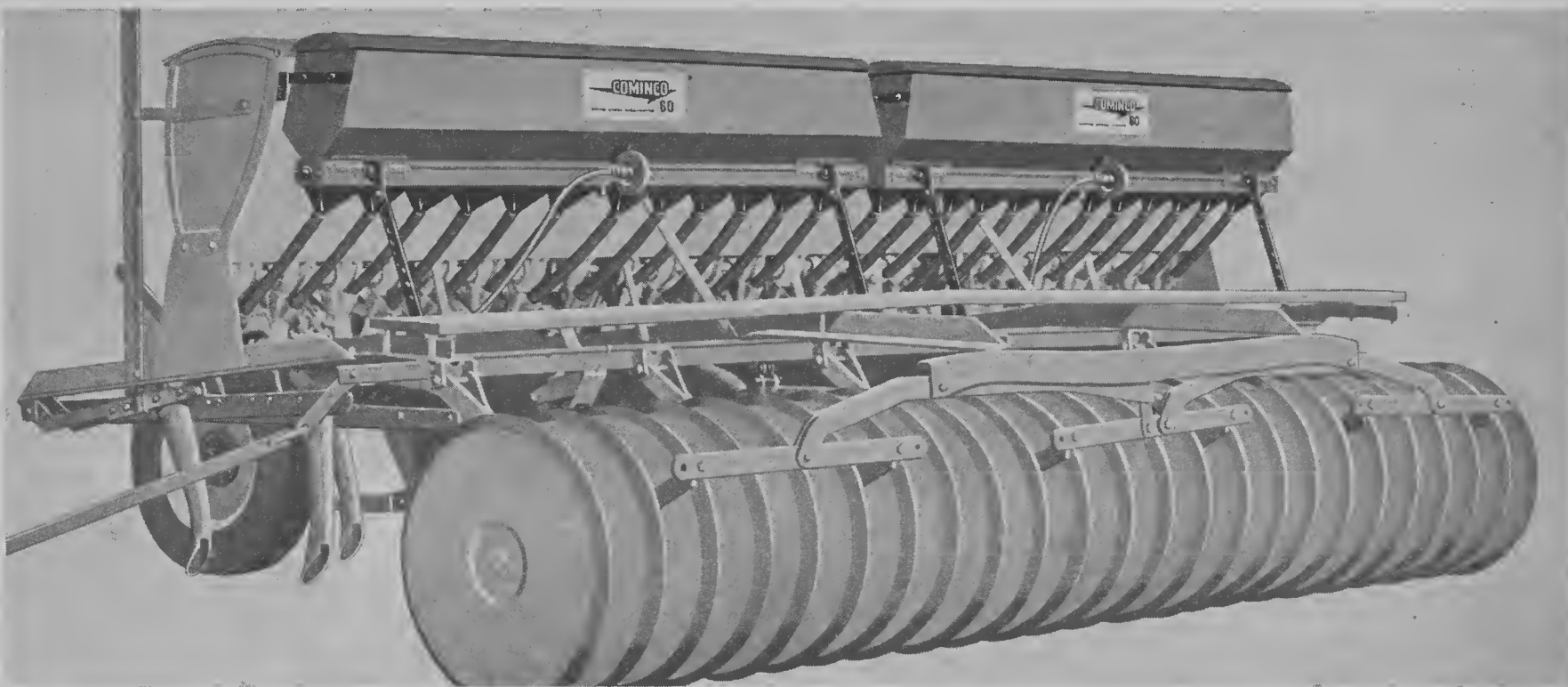
- 1st week 1-4:** Month will begin on a mild note, turning colder about 3rd. It will be cloudy and unsettled in coastal sections near 3rd.
- 2nd week 5-11:** Look for fair, mild weather during most of the week, with storminess and colder conditions moving in on the 10th and 11th.
- 3rd week 12-18:** Coldest weather is expected early in week with temperatures lowering again by 15th. Cloudy, unsettled weather for a day or two around 15th.
- 4th week 19-25:** The week is expected to be frequently unsettled, with rain in prospect near the 20th, and again the 23rd-24th.
- 5th week 26-31:** Mild weather is forecast to open the week. It will become unsettled by about the 28th and will turn colder near the 30th.

TH=Threatening



**NOW  
AVAILABLE**

# The **COMINCO** 60 FERTILIZER APPLICATOR



## COMPLETELY NEW FEED MECHANISM for TROUBLE-FREE OPERATION

The COMINCO 60 FERTILIZER APPLICATOR provides the fastest, easiest and most accurate way to apply fertilizer. Here is why it will make fertilizer application easier for you:

- It accurately feeds any free flowing Ammonium Phosphate fertilizer at rates up to 320 lbs. per acre (up to 233 lbs. per acre of Ammonium Nitrate.)
- It takes only a few seconds to change the rate of application.
- It has a large capacity box — up to 42 lbs. of fertilizer per lineal foot.
- It is ruggedly constructed throughout with special attention to the strength and water tightness of the fertilizer box.
- It is made in a range of units to fit almost every make, type and size of grain seeder.
- Its rate of application is constant and unaffected by seeding up or down hill.
- It incorporates a new feed-drive principle. A feature that simplifies installation on seeders because it is unnecessary to line up the applicator units accurately.
- It can be cleaned out quickly and completely.
- It is designed primarily to apply fertilizer in the drill runs but can also be used to broadcast fertilizer on grassland or stubble.

### Seed and fertilize in one efficient operation with the ALL-NEW COMINCO 60 FERTILIZER APPLICATOR

Long experience in farm requirements, wide knowledge of fertilizer characteristics plus an extensive research and field testing program stand behind the COMINCO 60 FERTILIZER APPLICATOR. It is a high quality machine combining simplicity, ease of instal-

lation and operation with sound engineering techniques. Few moving parts, low maintenance cost, light weight and many other features make the COMINCO 60 FERTILIZER APPLICATOR the most efficient on the market today.

The COMINCO 60 FERTILIZER APPLICATOR is available from your Elephant Brand dealer.

# **COMINCO** 60 FERTILIZER APPLICATOR

MANUFACTURED BY THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED  
Sales Offices: CALGARY • SASKATOON • WINNIPEG • MONTREAL • VANCOUVER

# Editorials

## Self-Help Eluded Dairymen

"SELF-HELP in the Sixties" was the theme promoted at this year's annual meeting of the Dairy Farmers of Canada. Addresses in the early stages by the president of the organization, Frank Lutes, and by guest speaker H. H. Hannam, president of the Canadian Federation of Agriculture, were solidly in keeping with the theme. They contained a wide area of agreement on how to get a program underway, designed to face the long-term problem of the dairy industry. As the meeting unfolded, however, this theme, while it wasn't forgotten (because it glared at the delegates from a large banner on the meeting platform), was exchanged for what might be more properly described as "Government Help in the Sixties." In fact, the policy statement approved at the closing session states that the amount of government help needed is unequalled in the history of the organization.

Those who are familiar with the dairy situation will concede a sizeable and complex problem exists within the industry, and that Government policy measures will be needed, at least in the short-run, if the incomes of a considerable number of farmers are to be maintained. Moreover, the dairy farmers' organization is to be commended for deciding, as it did, to try and increase the producer set-aside which is used to promote and advertise dairy foods. Notwithstanding these statements, the turn of events at this meeting was accompanied by several disappointments.

First, the major emphasis in the policy statement is to maintain or enlarge Government support and subsidies, almost to the complete exclusion of proposals aimed at developing a sound, long-term, self-help program. As already indicated, there was no scarcity of ideas (they are listed in a report of the meeting on page 12) as to how to proceed on this latter course of action, but a determination to do so was lacking. This is regrettable. The time is

here, if it has not already past, when a large segment of farmers who depend on income from the sale of milk and cream need to do more than think about how the Government can patch up their industry every year to keep them in business. We fail to see why, when dairy production and marketing has become essentially a domestic industry and almost completely protected from imports of dairy products, it is not reasonable to expect that a program can be devised which will make Government subsidies unnecessary. CFA President Hannam, himself a dairy farmer, would seem to agree. "It is my thought," he said in his address, "that a producers' orderly marketing program, co-ordinating the supply and price as between the various dairy products, together with price supports, could place the dairy industry in a position where government subsidies would not be necessary."

THE second disappointment came with the requests for the Government to make a payment to reduce the retail price of butter to the consumer by at least 10 cents a pound, and, at the same time, to maintain the returns to the producer at the present level. In this regard, no thought was apparently given as to where such a subsidy might eventually lead, so long as it halted the decline in butter consumption. One of the first questions the Government is bound to ask is how long is such subsidization to continue; one, two or more years, or indeed indefinitely? Recognizing that margarine is here to stay, is the industry going to be any more ready to face the competition at the end of some stipulated time period, or is the subsidy to be a permanent policy? These may be embarrassing questions, but they need to be answered, and some thought should have been given to them before the subsidy proposal was made. In addition, we cannot help but think the subsidy request would have been more palatable if it had been combined with

a gesture on the part of the dairy farmers to share the cost of making butter more competitive. If the dairy farmers had been willing to lower the support price by even 2 cents a pound, it would have taken some of the sting out of the subsidy, and made it easier for the Government to implement.

THE third disappointment involved a statement made by one of the industry's spokesmen when he said: "... I think you'll agree that it isn't wise to create the unrealistic illusion that cheese—or any other food—can be had cheaply. After all, we know that the cost of producing milk is high because we must pay a high price for the goods and services which go into its production. I would therefore like to suggest that we seek a continuation of the present price support on cheese and a continuation of the present stabilization payment of 25 cents per cwt. on manufacturing milk."

We disagree with this thinking on two grounds. The speaker seems to be saying, in part, that consumers can be made to pay what the producers think are fair prices for certain dairy products, regardless of whether the consumer thinks so or not, or whether the consumer can do without or buy substitute products. This is completely unrealistic. The Canadian economy is not a controlled one. Consumers react to price, and if a product is held at an artificially high price by whatever means, it doesn't follow that they can be forced to buy it. Dairymen should be the first to recognize this after the recent experience they have had with butter. The second point is that the stabilization payment is, in effect, a subsidy. The cheese producers are therefore depending on it, not only for domestic but export sales of cheese as well. Frankly, we seriously doubt the wisdom of trying to build up any valuable export industry on the basis of subsidies.

The dairy farmers have every right to expect stabilized prices through a government operated price support program. How long they can expect to be paid 50, 60 or even 100 million dollars in direct subsidies is something else again. We hope the men who planned this year's program at the dairy farmers meeting, and who made a number of good proposals to lead the industry out of its difficulties on a self-help basis, will not be so discouraged that they fail to try again. V

## Buying the Vote

THE Liberal Rally held in Ottawa early last month may have made the Party faithful who were present glow with enthusiasm, but on at least two counts it was a sad performance.

From a national standpoint, the major policy resolutions smacked too much of the "something-for-nothing" approach, with more largess for nearly everybody and lower taxes to boot. As a Toronto Globe and Mail editorial writer so succinctly put it: "They promised to shower good things upon the young (university scholarships) and upon the old (higher pensions); upon the unemployed (jobs for all) and upon the employed (a reduction in personal income tax). To the Maritimes, they offered coal-generated power; and to the Prairies, a two-price system for wheat." The Party Leader, the Hon. L. B. Pearson, sensed this weakness when he warned, at the Rally's closing banquet, that there was only one pocket from which payments to Canadians could be made. "It is yours," he is quoted as saying.

We can do no better than to repeat convictions which we expressed on this page just prior to the last Federal election. The days in which we live call for prudent, progressive and just government. Canadians have a duty to give a working majority to the party which most nearly fits this criterion. Political parties, for their part, should desist from doing little

more than trying to buy people's votes in their own selfish interests.

To this we would now add a further comment. After several years of disillusionment over the free spending ways and consistently large budgetary deficits of the present Government, and its failure to resolve some of the Nation's most pressing problems, we believe the voting public is no longer so enchanted, if it ever was, with the prospect of being bought with promises of a post-election payoff. The electorate is more intelligent than most politicians seem to think. What we believe it will be looking for is a party ready to give honest and courageous leadership to ensure the emergence of a soundly expanding, productive economy — one fully capable of meeting its obligations to all sections of Canadian society.

From an agricultural standpoint, the Liberal Rally seemed to be completely bewildered and without inspiration. Mr. Pearson accused the Diefenbaker Government of "failure to produce any kind of a solution for agricultural problems." Well, if the Liberals think what came out of the Rally resolutions is a better guide to success than what is currently being offered, they are badly mistaken. The agricultural resolutions, as far as we can make out, are devoid of any promising or imaginative proposals. They in no way adequately deal with the two most urgent fields requiring policy decision, namely, grain and dairying. Promising western grain growers a parity price

on their first 300 bushels of deliveries each year is not an answer to the grain problem, any more than the supplementary acreage payments of up to \$200 per farm which are currently being made by the present Government. They are both short term expedients. Either one must go, in many cases, to people who do not need them, and can be of little real assistance to those who are facing elimination. A continuing rash of piecemeal expedients will neither do much to ease agricultural problems nor attract the support of the majority of farmers. The best that can be said of the Rally, insofar as agriculture is concerned, is that it stood firm in pressing for lower trade barriers and rejected suggestions that Canada should retreat behind higher tariff walls.

Let no one misunderstand us. We are not opposed to social advancement on a wide front, either in agriculture or other sectors of our society. Quite the contrary, providing we earn such advancement. What we do oppose on the one hand, are empty, half-baked promises which may ultimately do more harm than good, and on the other, attractive promises which if carried out prematurely could commit the Federal Treasury to expenditures of such a magnitude that our economy would be unable to bear the strain without some staggering consequences. Is it too much to hope that political parties of whatever stripe will adopt more responsible policies than they have been inclined to do in recent years? V



# GUIDEPOSTS

## UP-TO-DATE FARM MARKET FORECASTS

**SMALLER WHEAT PLANTINGS** will be justified this year. Supplies will be more than ample if less acreage is seeded, even if we should have a severe drought.

**DURUM WHEAT POSITION** is more optimistic than that of bread wheat. Good overseas markets will reduce stocks to reasonable levels by August. If you have large stocks of bread wheat and are cleaned out of durum, consider increasing durum acreage substantially to balance your holdings. But count on storing much of it for some time.

**OAT ACREAGE** should be kept at last year's level or even increased a bit. Export markets will not likely improve but a heavy feeding season is on the way with hog and cattle numbers increasing.

**BARLEY ACREAGE**, which was cut rather sharply last season, could be increased somewhat again, to provide ample feed insurance for large livestock population. We are not expecting export markets to bound ahead unless U.S. does a big switch and cuts back on export subsidies.

**RYE CROP** was mostly sown last fall, and is likely to show little change. As in the past few years, markets for this crop will be strictly limited.

**FLAXSEED PLANTINGS** should be kept around last year's levels. The Argentine is harvesting an average crop now but stocks from last year's bumper one are still a drag on the market. Prices next fall may not be spectacular--but what crop prices are?

**RECORD RAPESEED ACREAGE** of 1960 should be maintained. Like flax, prices may not be too exciting, but a large and dependable supply will help greatly in establishing new markets. World edible oil supplies are not excessive.

**FOR MAXIMUM POTATO** returns, plantings in general should be reduced this year; however, after two seasons of favorable prices, tendency will be to increase crops. Although market is expanding we are near the point of swamping it.

**ACREAGE OF SUNFLOWER SEED**, and possibly mustard seed, could be increased. Both are contract crops, however, so look for a buyer before you get too involved.

**EGG PRICES**, having taken the expected sharp dip, should show a gradual improvement. It is doubtful if old hens will pay their board, so cull carefully.

**BUTTER PRODUCTION**, although declining each month since June as compared with a year earlier, has not adjusted enough to take pressure off storage stocks. Margarine continues to slip off with a larger slice of market because of wide price spread.

## What's Happening

### PREDICT INCREASE IN SPRING FARROWINGS

According to the Dominion Bureau of Statistics December 1960 hog survey, farmers intend to increase farrowings by 16 per cent in the spring of 1961. The number of sows farrowing in this period is estimated at 634,000 compared to 548,000 a year earlier.

The number of hogs on farms at December 1, 1960, totalled 5,526,000 head. This is about 14 per cent below the total of 6,417,000 at December 1, 1959. The decrease in Eastern Canada was 9 per cent and in Western Canada 20 per cent.

Hog gradings at inspected and approved plants, as reported by the Canada Department of Agriculture, were 26 per cent lower in the June to November period of 1960 than in 1959. Reduced marketings reflect not only lower numbers on farms at June 1 last year, but also increasing retention of gilts for breeding. ✓

### CATTLE NUMBERS UP —SHEEP DOWN

The Dominion Bureau of Statistics reports that the number of cattle and calves on farms at December 1, 1960, is estimated at 10,897,000. This is an increase of 4 per cent from the year-earlier total of 10,489,000. Again, as between 1958 and 1959, when the total number increased at the same rate, most of the increase was due to a further build-up of beef cow numbers in the West and a generally larger carry-over of steers and calves on feed. There were 7.5 per cent more steers than at December 1, 1959, with increases of 14.6 and 2 per cent in the West and East, respectively. Calves were 6 per cent more numerous.

The number of milk cows has been relatively stable, but increases during 1960 in Quebec, Ontario, Alberta and B.C. resulted in a net rise of 58,000 to 3,130,000 head.

The number of sheep and lambs, estimated at 1,139,000 head, was 4.5 per cent lower than at December 1, 1959. Sheep over 1 year old declined from 844,000 to 821,000, and lambs from 344,000 to 314,000. By provinces, decreases were most marked in Quebec and Alberta. Only Manitoba and Saskatchewan had more sheep than a year ago. ✓

### ONTARIO TO DEVELOP POTATO POLICY

The Ontario Department of Agriculture hopes to develop a provincial potato policy this year, it was announced by E. M. Biggs, Assistant Deputy Minister of Agriculture, when addressing the Ontario Crop and Soil Improvement Association annual meeting in late January.

"The time has arrived," Mr. Biggs said, "for all of us who are interested in potato production and marketing to take a real look at the potato situation in this province."

He said the Department felt facts on potatoes should be assembled, studied and an attempt made to "go

forward in a definite and dynamic way." The Department hopes to obtain the full co-operation of the province's growers. ✓

### MANITOBA SUNFLOWER GROWERS GET SUBSIDY

The Agricultural Stabilization Board has announced that the Manitoba sunflower producers will receive \$44,377 in deficiency payments on the 8.8 million lb. of 1959 sunflower seed crop delivered to the Co-op Vegetable Oils Ltd., Altona. The payment is being made at the rate of one-half cent per lb., and will bring the price to producers of No. 1 crushing seed to 4 cents per lb., which was the support price for 1959. The Board has also established a 4-cent support for the 1960 crop. This is 93 per cent of the previous 10-year average price of 4.3 cents per lb. ✓

### WOOL PRICE SUPPORT ANNOUNCED

A deficiency payment of 23 cents per lb. will be paid on the 1960 wool clip, according to a recent announcement from Ottawa. This payment is calculated as the difference between the stabilization price of 60 cents per lb., and the average market price per lb. f.o.b. Toronto for the basic grades, Western Range Choice half blood staple and Eastern Domestic quarter blood staple. The estimated production of wool in Canada during 1960 is slightly higher than the 1959 wool clip of 6.3 million lb. ✓

### THE "76 GRAZING CO-OP"

This newly formed grazing co-operative with headquarters at Piapot, Sask., recently completed one of the largest deeded land purchases in western history. The deal involved the buying of 25 sections from local rancher Alec Walmark for \$9 an acre. Because the Walmark property contains the old "76 Ranch" of pioneer fame, the group has retained part of this name in their title. Rancher Mel James is president, and Gordon Beasley is secretary of the association.

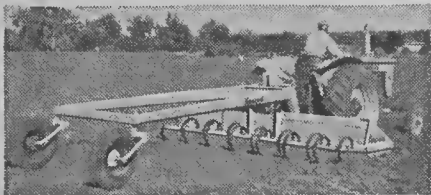
The transaction was a happy one from the standpoint of local residents. Alec Walmark has been a good operator. Fences have been kept in good repair and there has been no overgrazing. Also included is a spring flood watering system which ensures 800 to 1,000 tons of hay a year for winter feeding.

By purchasing their own property, instead of relying on Crown leases, as most grazing associations do, the "76" group can operate more freely. They will be able to plan for the future without worrying that some day their lease might be taken from them.

One of the main reasons for forming the grazing co-op was to keep this needed land from falling into the hands of communal groups, or non-resident individuals. Because he's a community conscious person, Alec Walmark recently turned down a higher offer made by American

## Announcing the NEW T M Series **Eversman** LAND SMOOTHERS

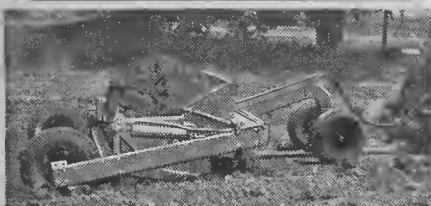
Low Cost • Maneuverable  
A Size for Every Tractor



Fits all standard 3-point hitch tractors. Six different size and price models, 6', 8' and 10' blades for small fields and limited tractor power. 10', 12', and 14' blades for larger acreages and tractors. These NEW LAND SMOOTHERS have application for maintenance and tillage on irrigated farms, and for land forming in the humid areas to correct surface drainage problems, fill washes and gullies, smooth terraces, benches, waterways, etc. Low initial investment since tractor length furnishes additional effective leveling length.

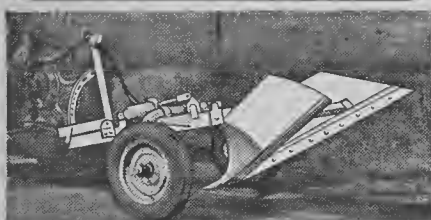
See The NEW

## **Eversman** HYDRAULIC CONTROL SCRAPER



Using your own tractor and the 2½ yard Eversman Scraper, you can do most earth moving jobs on your farm by yourself. Level land for efficient irrigation. Grade fields to improve drainage. Fill gullies and low spots. Build farm roads. Make terraces, grass waterways, reservoirs, ponds, dams, pit silos. Responds instantly to single valve hydraulic control. Loads with low power requirements but with large scraper stability. Hauls at high speed. Front dump permits accurate control of fill.

## The **Eversman** RUBBER MOUNTED Floating Hitch **DITCHER**



The Eversman digs and cleans ditches up to 6' wide and 27" deep. Mechanical or hydraulic control. Operated by any standard farm tractor. Four models for trail-behind or 3-point hitch system.

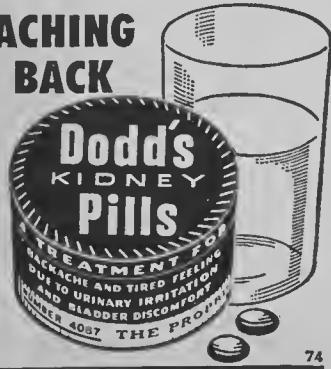
Write For Complete FREE Booklet  
Students Request Special Literature

## **EVERSMAN MFG. CO.**

Dept 58, Curtis and Fifth, Denver 4, Colorado

Write your nearest Distributor:  
**WINNIPEG**—H. L. Turner (Man.) Ltd.  
Sutherland and King St.  
**REGINA**—Dumarr Equipment Ltd.  
140 East 4th Ave., P.O. Box 950  
**WETASKIWIN, Alta.**—Alberta Engineering  
Ltd., P.O. Box 789

## How to Treat an ACHING BACK



74

## What's Happening



Executive committee of the Dairy Farmers of Canada pose at the end of the organization's Annual Meeting in Vancouver. (See story on page 12) l. to r. are F. Lutes, president; C. A. Cameron, executive-secretary; J. T. Monkhouse, vice-president; G. McLaughlin and F. Maddock, directors; W. Rettie, past president.

buyers. He insisted that the land go to residents of Piapot Municipality, and gave them plenty of time to arrange for financing. A further stipulation in the agreement gives the group an option to buy the rest of Walmark's land, if and when he decides to retire from ranching. ✓

### **WATERLOO A.I. UNIT NOW 20 YEARS OLD**

Canada's first artificial breeding unit, the Waterloo Cattle Breeding Association, will be 20 years old in 1961. The Waterloo Unit during this period has grown from an experiment to an organization employing 44 full-time employees and having annual receipts of \$440,000. In 1960, the unit showed a gain of 5.8 per cent in first services with a total for the year of 78,861. Such services were provided to 11 different breeds. Holsteins made up almost half of this business, with almost 47 per cent of the total. Herefords were second with 25 per cent, and beef Shorthorns third with 9 per cent. Other breeds and percentage of services were: Jersey, 5 per cent; Guernsey, 2 per cent; Ayrshire, 2 per cent; Charolais, 3 per cent; Dual-Purpose Shorthorn, 2.16 per cent. ✓

## **Agricultural Rehabilitation And Development Act Introduced**

Addressing the House of Commons on January 25, the Minister of Agriculture, the Hon. Alvin Hamilton, called for the adoption of a resolution which would authorize the Government to enter into agreements with provincial governments, or their agencies, for undertaking jointly three types of operations:

- (1) Projects for the alternative uses of land that is presently classified as marginal or of low productivity.
- (2) Projects for the development of income and employment opportunities for rural agricultural areas.
- (3) Projects for the development and conservation of the water and soil resources of Canada.

In moving the resolution, Mr. Hamilton suggested that following the First Reading of the Bill to enact

### **HOG PLAN HANGS IN THE BALANCE**

Leaders of Ontario's hog marketing plan now face the certain prospect of losing their compulsory powers unless they move quickly to develop an open method of sale. In defiance of an order of the Ontario Farm Products Marketing Board, the Hog Board refused to devise an outline, by January 16, of a new selling system under which all buyers of hogs would be given the opportunity to bid on each lot of hogs offered. As a result, the Government Board has spelled out the consequences that face the Hog Board if it remains adamant.

New regulations affecting the hog plan state that an open selling system must be in effect by April 1. The Government Board has notified the Hog Board that if the requirements of the new regulations are not fulfilled, the compulsory powers to direct and control the marketing of hogs will be withdrawn. This will mean that the present Hog Producers Co-operative, which is the Hog Board's selling agency, would operate only on a voluntary basis, and any producer could market his hogs in any manner he chooses. ✓

## Western Farmers Report Higher Yields

### **Flax Yield Exceptionally Good Where Crop Usually Poor**

"In low places where crop is usually poor due to wild oats, yield was exceptionally good... very satisfied with control."

Arnold Wegner  
Craig, Sask.

Avadex, Monsanto's pre-emergence wild oat herbicide kills wild oats as they germinate. It is incorporated in the soil at seeding time, remains active throughout the long germination period of the wild oat.



### **85% Control of Wild Oats in Wheat**

"I treated wheat with Avadex and was well satisfied with wild oat control of 85%. I am enthusiastic about the use of Avadex from the standpoint of decreasing the amount of wild oats going back into the soil. This will also increase my yields."

George Moffatt, Fardole, Man.

### **Flax Yield Boosted At Least 5 Bushels Per Acre**

"Increased yield at least 5 bushels per acre... wild oat control very good."



Langford  
McFarlane  
Rosetown, Sask.

With Avadex supplying dependable chemical control of wild oats, the farmer can safely seed early and reap an early harvest—with improved yields of clean crops and greater profits.

### **Saved \$25. Per Acre Thinning and Weeding in Sugar Beets**

"Avadex made it possible to seed beets early, resulting in increased tonnage per acre, and lower labor costs per acre. Avadex saved me \$25.00 per acre on thinning and weeding operations."

Fred W. Burton, Jr.  
Readymade, Alta.

### **Eliminates Delayed Seeding**

"With Avadex it now appears we can eliminate delayed seeding. This is particularly important to growers of rapeseed. The longer season will permit use of longer-maturing, higher-yielding Argentine rapeseed opposed to the Polish types."



R. A. Blacklaw

Tisdale, Sask.

### **Over 90% Control in Flax**

"I would never have seeded flax on 80-acre piece without Avadex... control well over 90%."

Gordon B. Howie  
Kindersley, Sask.

## **Avadex\*** WILD OAT KILLER

A farm product of Monsanto Canada Ltd.  
\*trademark of Monsanto Chemical Co.



## What's Happening

will be carried out under the new legislation.

**"Alternative Land Use.** Certainly, the development of alternative economic uses for marginal agricultural land will have a large part in the total program. I need mention only two instances of this. One is the encouragement of farm woodlots, of tree farming, of county forests, of reversion into Crown Lands, and so on, in Eastern Canada. The second is the conversion of marginal cropping land in Western Canada to grass by means of the community pasture technique. These are only some of the examples of alternative economic uses for land. Others deal with urban expansion, recreation, road building, airport construction, etc.

"Steps of this nature serve three purposes. They provide for better utilization of marginal agricultural lands; they provide new sources of income for people in the area; and to the extent that they remove land from agricultural cropping they will help to reduce surpluses which constitute a serious problem for agriculture.

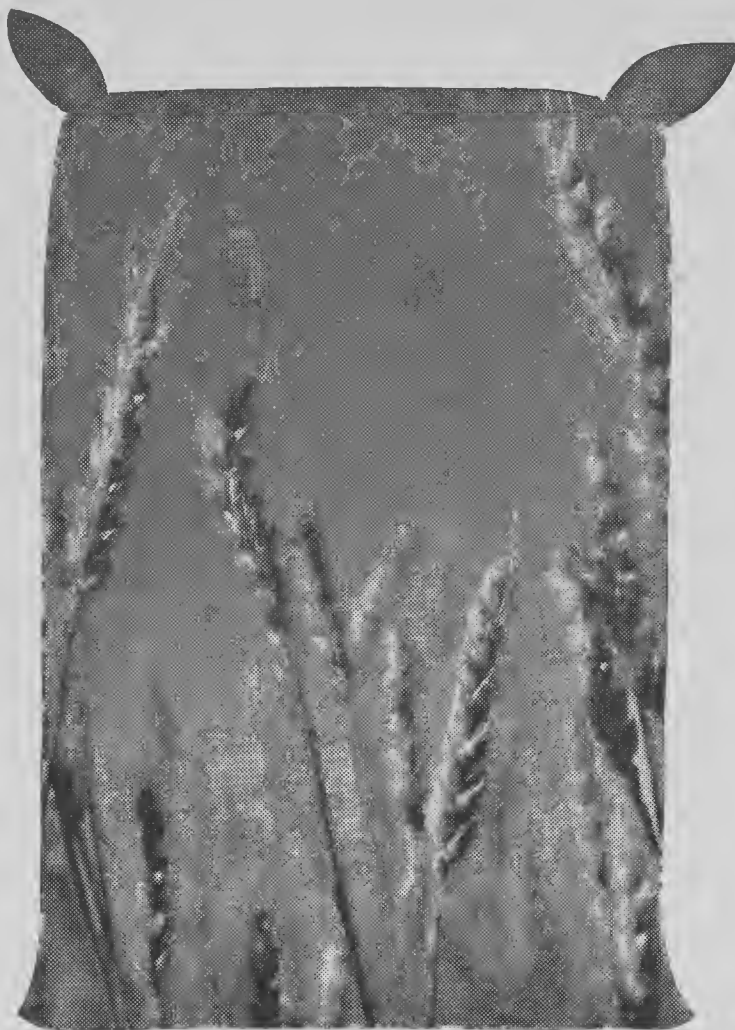
**"Rural Development.** In addition to developing alternative land uses, the legislation also envisages the development of new income opportunities for people in rural areas. Local industry, recreation and technical training are among the ways and means that will be considered.

"The development of this phase of the program envisages a large measure of local participation. It is proposed that provincial and Federal authorities would provide guidance to local groups in assessing their own circumstances and in developing new sources of income. It is, of course, intended that all services and agencies of other departments of the Government of Canada, which can contribute to this, will be brought to bear in the total effort. It is also envisaged that the Federal Government, in co-operation with provincial governments, universities, educational institutions and individuals will carry out programs of research and investigation in the general field of rural development.

**"Conservation of Water and Soil.** Finally, the legislation will authorize the Minister of Agriculture to enter into agreements with the provinces to carry out soil and water conservation projects for agricultural purposes. The importance of this is, I think, well understood by all who are familiar with the circumstances of Canadian agriculture.

"I should like to make it clear that it is not the purpose of this legislation to reduce the number of farms. Those who feel that the small farm problem can be resolved by uprooting people arbitrarily from their farms, do not, in my view, understand the deep attachment of rural people to their home surroundings. This legislation is designed, rather, to help by various means to improve the income and standard of living of the smaller and more marginal family farms and in that way to help improve the overall position of agriculture."

v



**99% Clean**

# Avadex

## MONSANTO WILD OAT KILLER

In 1960 Canadian farmers using Avadex\*, Monsanto's soil-treatment wild oat killer, reported yields increased as much as 57% to 160% per acre on flax; 100% on barley; and tremendous labor savings coupled with increased yields up to 1½ tons per acre on sugar beets. Fields properly treated were consistently 90% to 99% free of wild oats.

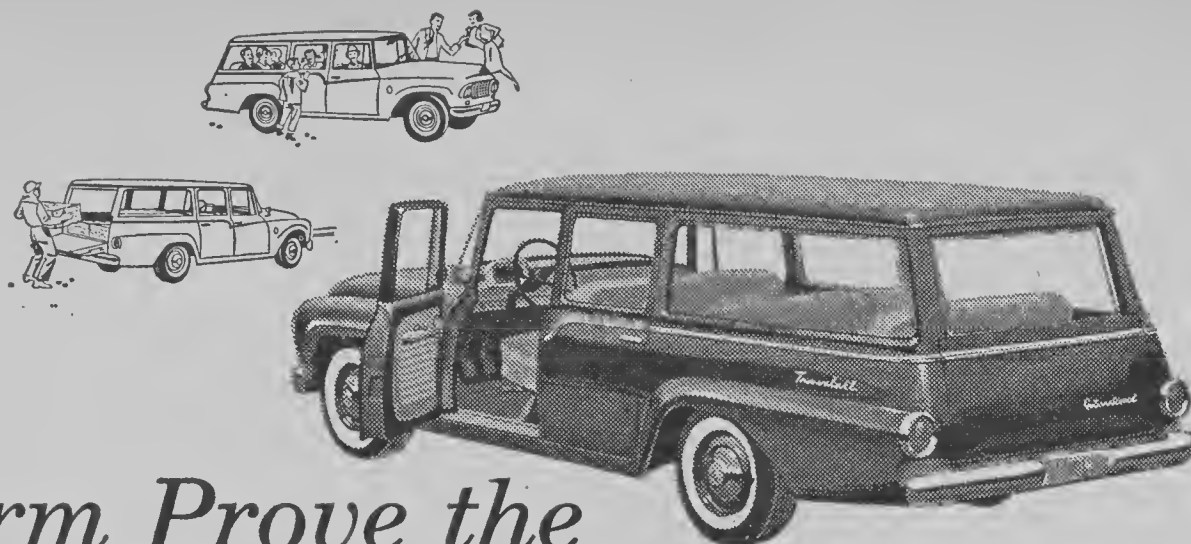
Avadex is Monsanto's pre-emergence wild oat herbicide that kills wild oats as they germinate. It is incorporated into the soil at seeding time and remains active throughout the long germination period of the wild oat. With Avadex supplying dependable chemical control of wild oats, the farmer can safely seed early and reap an early harvest with improved yields of clean crops and with greater profits.

\*trademark of Monsanto Chemical Company



**MONSANTO CANADA LIMITED**

YOUR FARM SUPPLY DEALER WILL SOON BE SHOWING AN INFORMATIVE NEW FILM, "THE FIELDS TELL THE STORY", REPORTING ON HOW CANADIAN FARMERS PROFITED BY USING AVADEX. ASK YOUR DEALER; ALSO OBTAIN A COPY OF A NEW BOOKLET ON WILD OAT CONTROL; WRITE: MONSANTO CANADA LIMITED, P.O. BOX 147, WINNIPEG, MANITOBA.



*Farm Prove the*

**NEW**

Light  
duty

**INTERNATIONALS**

**NEW low profile**

The beautifully styled Internationals are up to 5 inches lower—but give *more* headroom! Because muffler and gas tanks do not project below frame, you have more road clearance, too.

**NEW riding comfort**

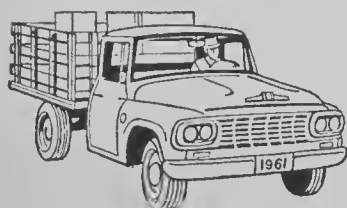
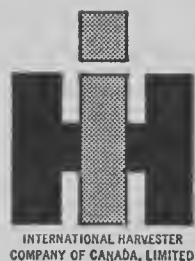
International's new, easy-riding spring suspension smooths out the roughest roads. Longer wheelbases add to riding comfort and give better weight distribution.

**NEW steering ease**

Five minutes at the wheel will convince you that here is *true* fingertip steering! Light and responsive handling makes the Internationals a *pleasure* to drive.

**NEW all through**

*New* is the word for International's complete line of light-duty trucks—V-8 or 6-cylinder power. Test drive the new pick-up today. And watch for the beautiful, new Travelall station wagon.



*Call your nearby*

**INTERNATIONAL TRUCK DEALER**

*for a demonstration on your farm*



**BAYARD HOYT**

# The Man Who Made Trees Grow

*Hoyt loves the woods and has found how to make them pay.*

**F**IFTY years ago, when Bayard Hoyt was a boy snaring rabbits through the woods that hemmed in his father's New Brunswick farm, he was continually blocked by one piece of land so densely treed that it was impassable. It seemed a natural stockade. He couldn't penetrate it with his traps, but he consoled himself that the rabbits would never get through it either.

Ten years later, when Hoyt was nearing manhood and his interest turned from trapping rabbits to cutting wood, he noticed something about that thicket. The trees didn't seem to have grown at all. For all he could tell, they had stood, as if petrified, for 10 years. Similar sights went unnoticed by many farm boys of the day, for the province was blanketed in forests. Experienced woodsmen cut where the trees were ready, and ignored other areas. They advised beginners to do the same.

But Bayard Hoyt had a mind of his own. He moved into that 35-acre tangle of trees and began opening it up. He hacked paths into the dense growth. When he severed a tree at the butt, it stood jammed above and he had to pull it to the ground. The biggest trees there were four inches in diameter.

Curious neighbors shook their heads at young Bayard working his thicket. They scoffed at him for wasting his time when there was plenty of timber ready to cut nearby. They didn't realize then that the young farmer was a pioneer, developing an idea that would one day leap to prominence right across the country—the idea that a woodlot could be managed and worked for profit. Because Bayard Hoyt was managing his woodlot. He was proving to himself, if to no one else, that you can manage a woodlot in such a way as to make trees grow, just as you manage a farm to grow crops of hay or oats.



*Selective cutting lets the sunlight filter through, giving faster growth and good regeneration. Hoyt cut here 40 years ago.*

*In contrast, the stand at the left, not Hoyt's, is being wasted. It's too thick, growth is at a standstill, there is no regeneration.*

by **DON BARON**

**H**OYT differed from most woodsmen in that he looked at his trees questioningly. He stopped to count the rings of growth in the trees he felled. And those rings told him a story. Wide rings told of fast growth. Paper-thin rings told of times when growth had been at a standstill. He decided that crowding and lack of sunlight might be the reason. And he proved this to himself in his 35-acre thicket. When he opened up his thicket, and the sunlight came in, the trees suddenly began to reach skyward.

He sold firewood from his thicket as he thinned it. Eleven years after his start, he was able to harvest a single cut of 32 cords from the 35 acres. In the succeeding 18 years, he cut and cut, taking out pulpwood and logs. In that time, he averaged 1¾ cords of wood (pulp and logs) per acre per year—an astonishing record. Yet, his stand is better today than it ever was.

**N**OW Hoyt's idea of managed woodlots is catching on. New Brunswick's agricultural extension people have begun to see what woodlots can mean to farmers in dollars and cents. They are playing an active role in developing a Tree Farm Program.

Hoyt's own woodlot has been the site of field days to demonstrate woodlot management. And at such times, Hoyt loves to take doubting



*Here Hoyt (r.) tells tree farmer H. Allen and provincial forestry extension man, J. Torunski (l.) how he thinned his original 35-acre thicket.*

observers, or newly converted woodlot enthusiasts, through his woods to show them what he has learned, and what he has been able to do.

Hoyt says, with the conviction of experience, that there are two kinds of people who are real enemies of a good woodlot—the ones who clear-cut and leave nothing, and the ones who never go into their woods at all to cut. The man who clear-cuts leaves a woodlot unable to regenerate itself in a reasonable time. The man who never cuts is even worse, because he leaves the trees too crowded to grow, choking one another out, and smothering out the young trees below as well.

"Trees are to be cut, not saved," he says. "But they are to be cut selectively." By applying this idea in the past four decades, Bayard Hoyt has shown the lead to woodlot owners across the country.

Hoyt is a full time woodlot man today. But he was brought up a cattleman and horse dealer and continued his farming for two decades as he experimented with his trees. In 1940, he decided that his heart was in the woods. He was never happier than when he was walking among the trees, an axe in his hand, searching for new secrets about the growth of trees. He had 200 acres of woodlot then, and he began buying more woodland nearby.

He bought mostly poor and run-down woodlots that had been cut over so hard that local people figured they were worthless. He bought lots here and there, putting together 50- or 100-acre parcels. By 1952, he owned almost 4,000 acres of woodland. He has been devoting his energies to looking after those trees ever since.

Hoyt still spends half his time walking through his woods with the easy pace of a man 20 years his junior, marking the trees that should be cut, laying out roadways through remote areas, and keeping his woodcutters working most effectively. He loves his woods—but more than that, he has learned how to make them pay.

# DAIRY FARMERS Want Emergency Help

*Their theme was self-help,  
but not without substantial government help first*

CANADA's dairy farmers need immediate government subsidies of substantial proportions to stabilize their incomes and improve the domestic and export demand for dairy products. Such emergency measures are required to meet an emergency situation, until such time as dairy farmers can develop and embark on their own self-help programs—programs capable of coping adequately with the problems of their industry in the years to come. Essentially, this was crux of the policy statement which emerged from the annual meeting of the Dairy Farmers of Canada held in Vancouver last month.

## SELF-HELP

THE theme of the meeting was "Self-Help in the Sixties." Several worthwhile self-help ideas were presented by keynote speakers, and officers of the organization. Only one of these—albeit an important one—was taken up by the delegate body and included in the 1961 policy statement. Agreement was reached to try and extend the dairy farmers' June set-aside to cover a 12-month period, with a deduction of one-quarter of a cent per pound butterfat per month or the equivalent.

This decision was made on the premise that the returns to the milk producer can best be improved by increasing the sales of dairy products. Keynote speakers for whole milk, butter, concentrated milk products and cheese, each in turn, called for additional emphasis, through the Dairy Food Service Bureau, on advertising and promotion of these products. The only way this could be achieved, of course, was to attempt to substantially increase the total set-aside collection.

Other self-help suggestions, which were brought forward but not acted upon in any concrete way by the delegates, included the following:

- The adoption of a national approach to marketing programs, and the development of a national milk marketing plan.
- Set in motion plans for a special study and research into dairy policies, on the grounds that a start now would be the means of achieving a full-scale and forward-looking program a few years ahead.
- Take steps to improve the quality of milk and cream at the farm level, including inspections of all types of farms from which the raw material is sold.
- Bring about a system of pricing milk on a solids-not-fat basis.
- Expand the exchange of information on dairying in particular and farming in general, with a view to improving both producer and consumer understanding and relations.
- Hold a series of three regional meetings, sponsored by DFC, at which both farmers and processors could improve relations between these two segments of the dairy industry, and discuss co-operative projects of mutual benefit to both.
- Develop processor-producer joint advertising and research programs, to expand dairy product sales and to create new products and improve the present products of the industry.

## BUTTER POLICY

"WE would have a fairly healthy industry if we did not have the butter problem," were the words of John T. Monkhouse, a DFC vice-president and Manitoba director, who led off the policy discussion on this product. What is the problem? According to Mr. Monkhouse it stems from the fact that per capita butter consumption has been decreasing steadily since 1956. It has dropped 3.45 lb. in the past 4 years, and is still on the decline at an overall rate of 1 million lb. a month. In contrast, margarine consumption has steadily increased. In the first 11 months of 1960 it was running 9 per cent above the 1959 consumption level.

The reasons for the decline in butter consumption, Mr. Monkhouse thought, were: (a) The widening price differential between the two competitive products; (b) the switch to margarine



[Photo by Williams Bros.]

*Frank Lutes, busy Dairy Farmers' president thanks B.C. friends for the totem they presented to him, and the Fraser Valley Milk Producers Assoc. for its many acts of hospitality at the meeting.*

caused by rising unemployment; (c) the diet fads; and, (d) the fear that high butterfat intake is associated with heart disease. He proposed that the best approach to the problem was to recommend a way to cut down the price difference between butter and margarine.

The delegate body agreed! They approved the following 4-point butter program for presentation to the Federal Government:

1. That the existing offers to purchase price stabilization system be maintained.
2. That a payment be implemented to reduce the retail price of butter to the consumer by at least 10 cents per lb.
3. That such payment be made on all butterfat going into butter.
4. That the Canada Department of Agriculture continue the butter promotion program through the auspices of the Butter Advisory Committee which the Government established last year, so that the full benefit of a long-term program can be realized.

What this means is that the dairy farmers organization wants the butter support price under

the Agricultural Stabilization Act to remain at 64 cents per lb., basis Canada First Grade creamery butter at Montreal. Farmers would continue to receive the same returns for butterfat in the coming dairy year as they are at present. Consumers, on the other hand, would be able to buy butter more cheaply. In 1959, the average retail price was 69.6 cents per lb. If the DFC proposal is implemented, consumers would pay approximately 60 cents a pound or less for their butter requirements.

Speakers and delegates alike rejected any lowering of the support price. They thought this could only have drastic results, because cream producers are not now meeting their production costs. It was pointed out at the meeting that the average value of creamery butterfat at the farm increased 9 per cent between 1954 and 1959, while costs of goods and services used by farmers rose by 13.4 per cent in the same period.

Canadians consumed an estimated 286 million pounds of butter in 1960. If the Federal Government paid a 10-cent-per-lb. subsidy, it would appear likely that the total annual cost of the proposed program could amount to \$30 million or more. No one would hazard a guess as to how long such assistance would be needed.

## CHEESE POLICY

TURNING to cheese policy, the Dairy Farmers of Canada delegate body voted to request the Federal Government to:

- Continue the present cheese price support of 32 cents per lb.
- Eliminate the price differential between the amounts paid for Ontario and Quebec cheese.
- Continue to intercede with the United States Government for some relief under its quota restrictions so as to permit a larger export of Canadian cheddar cheese to that country.

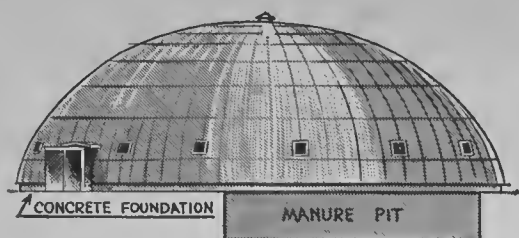
In addition, Ontario cheese producers were complimented on developing a workable self-help plan which favorably affects the exports of premium cheddar cheese. A levy is collected from Ontario cheese milk producers. The money collected is used to allow the Cheese Producers' Marketing Board to offer its premium product at somewhat lower price in the export market. DFC annual meeting delegates asked their officers to press for legislation which would enable other dairy groups, along with cheese milk producers, to expand this program. As matters stand now, whole milk producers, as an example, cannot collect a levy to support the cheese producers' self-help scheme.

## MANUFACTURING MILK

SEVERAL points in the policy statement deal with milk for manufacturing purposes, and concentrated milk products in particular.

**25-Cent Stabilization Payment.** Considerable debate took place as to whether the present Government subsidy of 25 cents per 100 lb. of whole milk delivered for manufacturing purposes should be extended to cover the surplus from fluid milk shippers, and to those who pool their milk as is the case with a large number of B.C. milk producers. Some delegates argued that surplus fluid milk was already causing serious difficulties for the concentrated milk, (Please turn to page 78)





# Their HOME is a DOME

*So round, so firm, so compact, this hog barn gives 1 sq. ft. of floor space for 1½ sq. ft. of wall*

by CLIFF FAULKNOR

**W**HEN the Froese brothers of Twin Butte, Alta., saw a picture of a model geodesic barn in *The Country Guide* (January 1959 issue) they decided this type of building might solve their hog housing problems. To get more details, they wrote the model's builder, Prof. Jack Pos of the Ontario Agricultural College's engineering department. Professor Pos sent plans for a dome structure with a 38-foot diameter, plus a list of materials and costs. These plans called for a self-supporting plywood shell with none of the inside structural framework found in other geodesic buildings.

But the five Froeses wanted a structure big enough to house 500 pigs of all ages. After many sessions with rule and pencil, they had expanded the plans to cover a building 80 feet in diameter, with a height of 26 feet 6 inches at the dome. Fortunately for them, a sixth brother (who is a Vancouver mechanical engineer) was visiting the farm at the time. With his help, they were able to find their way through the maze of necessary calculations.

Hampered by severe winter weather and their regular farm tasks, they set to work. For some of the more finicky jobs, they hired carpenters. About one year later, the building was finished.

**T**HE Froese barn consists of an inner skin of 5/8-inch-thick plywood sheets, and an outer skin 5/16-of-an-inch in thickness. These two shells are separated by an inch of insulation. Each sheet overlaps its neighbor at the horizontal join, and is fastened by dozens of small steel bolts. Vertical joints don't overlap, but are sealed with narrow strips of plywood.

"If we'd built the walls in the summer we could've glued the sheets together," Bruno (Buck) Froese pointed out. "That would've been easier than bolting them."

For ventilation, the Froeses have a big circular vent and fan at the apex of the dome, plus small rectangular vents at intervals in the circular concrete foundation below. Originally, they'd planned to draw air in at the top and blow it out the bottom vents. But they soon found this concen-

trated foul air in the lower part of the building. Now, they bring air in through the foundation vents and expell it from the ventilator in the dome. To keep out cold, the vents have been ducted up to a height of 16 feet.

Another feature of the round barn is a 42 feet by 30 feet by 8 feet pit for liquid manure, which is located under the building's concrete floor. When the hog pens are hosed out, the liquid goodness flows down drains to the pit, from where it can be pumped and spread on the land.

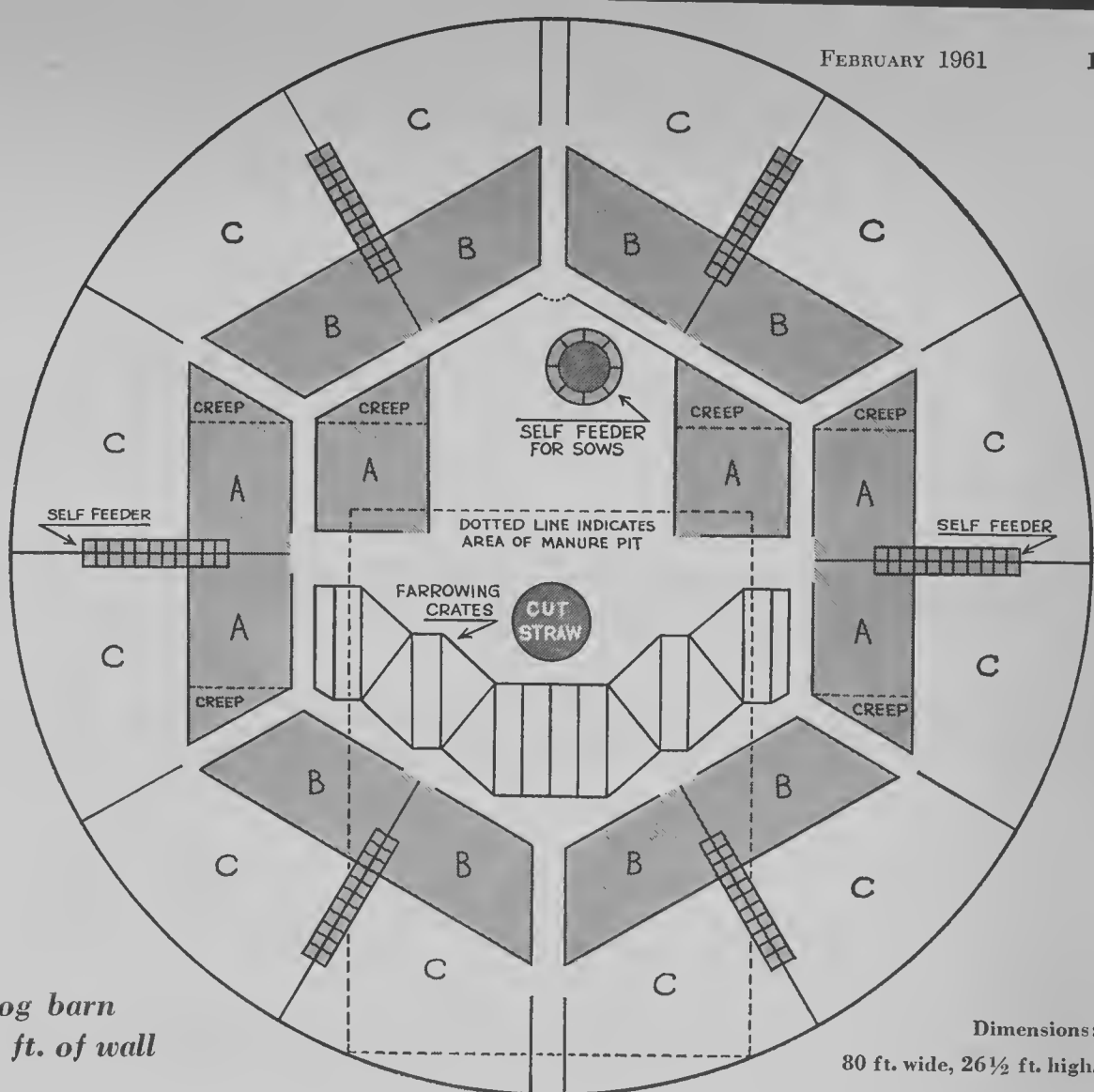
"One of our biggest headaches was getting rid of the smell from the pit," Kurt Froese said. "We were able to reduce this by venting our pit to the outside."

**T**HE Froeses raise sheep, hogs and beef cattle. All their feed is grown and mixed on the farm. Feed is piped from the mixer shed to the top of the dome. From here, a revolving pipe services the six dual self-feeders which divide the pens around the circular floor like spokes of a wheel. Cut straw for bedding is stored in a circular plywood bin located near the "wheel's" hub.

The brothers are planning a continuous production goal of two litters a week. Young piglets remain in the farrowing crates 3 weeks. Then they're moved to creep feeder pens for 3 more weeks and weaned. From here, they're grouped in pens according to size, finally going into finishing pens which are located around the "wheel's" rim.

They expect their new barn to be warmer than more conventional types, and easier to clean. Because of the reduced wall area, there'll be less heat loss. Gale damage will be negligible too, for winds slip from the dome's smooth surface like water off the back of a whale.

"I think farm dome structures are the coming thing," Kurt said. "Here we have only 7,896 square feet of wall enclosing 5,080 square feet of floor space. No other type of building can match that."



Pigs are farrowed in crates, where they stay 3 weeks; move to "A" pens for 3 more weeks, with creep feed, until weaned. Next they go to "B" pens in groups according to size, and then are finished in "C" pens. Sows from crates are let into the central loafing area for exercise and feed. Dotted line indicates the liquid manure pit under floor. Adjustable pipe fills feeders.



[Guide photos

Barn has a concrete foundation with rectangular vents spaced along wall.



Geodesic barn when still under construction. An auger was added to carry the feed from mixing shed to top of dome.

# Crossbreds In Today's Farming

*Haphazard mixing of breeds is certainly no magic formula for success in the livestock business. But as the author points out, crossbreeding can be profitable if you know how*

by **DR. W. E. HOWELL**

*Associate Professor of Animal Husbandry,  
University of Saskatchewan*



Dr. W. E. Howell

**T**HERE'S a wonderful opportunity and an exciting prospect for the livestock producer who is prepared to streamline his operation in the light of modern breeding techniques. All it requires is a bit of know-how and guidance, and a lot of organization and co-operation.

Let us start with a simple outline of what livestock breeding is about. It will be agreed that the ultimate function of livestock is to serve man's needs, and that some breeds are better adapted to render this service than others, under certain conditions. However, if no adapted breed with the desired economic features exists, a combination of two or more breeds (crossbreeding) may provide a useful type. For example, there are the Brahman x British breed crosses in the southern U.S.A.

Where two or more breeds show their adaptability to the environment and suit the market requirements, efficiency of production may be increased simply by crossing the breeds. Hybrid vigor is the popular name for this boost in vitality, growth, disease resistance, fertility, and production of milk, wool, meat or eggs, and so on, which is often apparent in crossbred livestock.

The wonderful success of hybrid corn has led to an effort on the part of livestock breeders to secure similar benefits from hybrid vigor in animal production. The systematic crossing of breeds of livestock has been practiced for a long period in Europe. In the British Isles, Blue-Gray cattle (Angus-Shorthorn or Galloway-Shorthorn) have long enjoyed an enviable reputation both in the show ring and on the fat stock markets. Many

breeds of sheep are also crossed for the production of market lambs not only in the British Isles but in North America and New Zealand and Australia. Crossbreeding in swine is an established and profitable practice in many countries.

In general, experiments on crossbreeding show an advantage of the crossbreds over comparable purebreds. The advantage has not been sensationally large in all cases, nor has it been consistently in favor of the crossbreds in every respect; but there has been enough advantage to justify the practice for commercial livestock production.

## Beef Cattle

**T**HE University of Saskatchewan's beef cattle crossbreeding study conducted by Shaw and MacEwan some years ago, showed definite advantage for the crossbreds over their purebred relatives in rate of gain and quality of carcass.

A recent Canadian study compared the performance of Charbray x Hereford steers with straightbred Hereford steers out of the same herd of range cows. The crossbreds were 71 lb. at weaning, and 131 lb. heavier after a 242-day feeding period than the straightbred Herefords were. The eye of lean was larger and the muscle fibers smaller in the crossbreds, and above all, the net profit per carcass favored the crossbred group.

Studies at Miles City, Mont., comparing purebred Hereford steers with Shorthorn x Hereford steers showed that the crossbreds were 15 lb. heavier at weaning and 85 lb. heavier after 252 days on feed. They gained better than a quarter

of a pound *more* per day on feed, and on less feed per 100 lb. of gain. The crossbreds had a dressing percentage of 57.7 vs. 56.3, sold at a higher price per lb., and returned nearly 8 per cent more profit above feed and marketing costs than did the straight Hereford steers. One of the most interesting observations, and one of considerable importance, was that the crossbred steers had fewer digestive disturbances, such as bloat, scouring, off-feed, etc., than the purebreds had.

A continuation of the Miles City studies involved breeding the Shorthorn x Hereford females to Aberdeen-Angus bulls. The heifer calves from this cross were grown out and bred to Hereford bulls to complete the cycle. Each generation of crossbreds outdid the previous generation in production characteristics, and the differences between crossbreds and purebreds widened with each generation. These results illustrate the distinct advantage to be gained from using crossbred females as breeding stock.

## Dairy Cattle

**T**HE rather few crossbreeding experiments with dairy cattle have involved breeds differing widely in their production characteristics. Hence, a breed such as the Holstein has been crossed with the Jersey bringing together high volume-low test with a low volume-high test. Hybrid vigor was evident in the higher fat yield obtained in this crossbred, but neither volume nor test exceeded the better parent in more than a few cases.

However, these observations were based on single lactations and not lifetime production. It



**Left:**  
Charolais, the French beef breed, crossed with Hereford cows produced these uniformly white-faced, buff-colored steers.

**Right:**  
These Leicester x Range ewes gave 18 per cent more lambs than their dams did, when each was mated to a Suffolk ram.

[U. of S. photos]



## AN ABC OF CROSSBREEDING

- ✓ Crossbreeding is intended to increase efficiency of production through marketing more animals in a shorter time on less feed.
- ✓ Hybrid vigor, a characteristic of crossbreds, means a boost in vitality, growth, disease resistance, fertility and production.
- ✓ The quality of individuals used in a crossbreeding program is as important as the choice of breeds.
- ✓ The mating of crossbred females to purebred males is the key to greatest benefits from crossbreeding.
- ✓ Crisscrossing and rotational crossing are two methods recommended to farmers for a continuous crossing program.
- ✓ Crisscrossing calls for the alternate use of sires of two different breeds. Rotational crossing is exactly the same, except that sires of three or more breeds are used alternately.
- ✓ An alternative method is to purchase selected crossbred females and mate them to the same unrelated male, year after year; then to market all the offspring.



might well be that the crossbred would excel the better parent in milk volume as well as fat yield, if longevity were taken into account. Nor can we conclude from this the results to be obtained from crossing breeds with similar production capacities such as Holstein and Ayrshire. A rather general recommendation to dairymen would be to use the best sire available for the production characteristics they want, whether this involves crossbreeding or straight breeding.

### Swine

A VERY large crossbreeding study conducted with swine in Minnesota has shown several interesting results, from which very important conclusions and recommendations can be drawn for the commercial livestock breeder.

1. The production from 2-breed crosses, 3-breed crosses and backcrosses was superior to the comparable purebreds that went into the crosses.

2. The greatest increase over the purebreds was noted in the 3-breed cross combination.

3. The crossbred sows were superior to purebreds for producing market pigs. The resulting pigs benefited as much from being out of crossbred sows as they did from being crossbreds themselves.

4. The crossbreds had larger litter size and greater litter weight at weaning, needed less time to reach market weight, and less feed for a pound of gain in live weight.

5. The crossbred litters averaged from one-third pig to 2 pigs larger at weaning. On the average, each pig weighed from 5 to 7 lb. more at weaning, and the litters weighed from 39 to 96 lb. more than the purebreds.

6. The crossbred pigs reached a market weight from 17 to 22 days earlier than the comparable purebreds, and they reached that weight on from 27 to 36 fewer pounds of grain.

A review of a number of crossbreeding studies with swine can be summarized as follows:

- The percentage of stillborn piglets was less among crossbreds than among purebreds.
- Crossbred pigs were more vigorous at birth and had a greater percentage survival to weaning.
- The crossbred averaged 3 to 4 lb. heavier at weaning than the purebred pig.
- Crossbreds made more rapid gains in the feedlot and on less feed (0.12 lb./day more gain, and 13 lb. less feed per 100 lb. gain).
- Crossbred sows were more fertile and better milkers, and hence more efficient pig producers than straightbred sows.

### Crossbred Females

CONTROLLED experiments with large numbers of swine have shown an increase in production over purebreds of 6.3 per cent for a 2-breed cross, and 11.7 for 3-breed crossbred animals. The difference between the 2-breed cross and the 3-breed cross is partly because the latter are out of crossbred females

whereas the former are out of purebred females.

Not only do crossbred animals show superior productive capacity, but the crossbred females also excel in reproductive potential. There is ample evidence that crossbred females are more fertile, and in the case of sheep and swine, the crossbreds give birth to greater numbers of young.

Crossbred females are also superior in their mothering ability because their hybrid vigor imparts to them a greater potential for both prenatal and postnatal nourishment of the

young. The prenatal and preweaning periods make up better than half of the total life of a meat animal from its conception to slaughter. Consequently, if the crossing of two breeds results in sufficient increased vigor to make crossing worthwhile, then the crossbred females should in turn be sufficiently more vigorous to make better mothers than purebred or high grade animals. This principle is very well illustrated by experiments with swine which have shown a production advantage of 6 per cent in favor of crossbred pigs from crossbred mothers over crossbred pigs from purebred mothers.

### Crossing Methods

WITH respect of this last point, there have been two methods recommended to the farmer for a continuous program of crossing, no matter what class of stock he is dealing with. The first method is called crisscrossing and calls for the alternate use of sires belonging to two breeds. The second method, called rotational crossing, is exactly the same except that sires of three or more breeds are used alternately in a round-the-clock fashion.

In swine, the crisscross system might alternate between boars of the

## CHISEL with less than a gallon per acre



## THAT'S THE D-17 WHEAT COUNTRY TRACTOR

NOW . . . a tractor for the West with a new kind of economy . . . and ability to cultivate row crops, too! The powerful D-17 delivers speed, flotation and traction for big-acreage tillage. Handles chisel plows up to 13 feet in size with soil-shattering action or for rod weeding . . . on less than a gallon of fuel per acre.

TRACTION BOOSTER system does it . . . fuel savings up to 25% — more acres per hour,

per day. Power Director controls speed and power . . . on-the-go shifting, high range for over 46% more work capacity — low range for 42% more pull power.

Dry-land farming costs less with a D-17 . . . let your Allis-Chalmers dealer prove it.

ALLIS-CHALMERS, FARM EQUIPMENT DIVISION  
CALGARY • EDMONTON • REGINA • SASKATOON  
ST. HYACINTHE • TORONTO • WINNIPEG

**You've never seen tillage power that saves you so much**

- Seat located one easy step up
- Sit or stand driving
- Free-swinging drawbar
- "Big Stick" control of travel



Ask your dealer about the Allis-Chalmers plan to finance your time purchase of farm equipment.

TRACTION BOOSTER is an Allis-Chalmers trademark.



**Get the dollar-making difference with ALLIS-CHALMERS**



Here are three successive generations: A 5-year-old Shorthorn cow (right) is dam of the 2-year-old Charolais x Shorthorn female (center) which is, in turn, dam of the 2-month-old female (left) by an Aberdeen-Angus bull.

Lacombe (or Landrace) and Yorkshire breeds. A rotational scheme could include all three. For ease of breeding management, the entire sow herd could be replaced every third or fourth year with replacements grown out from a previous farrowing and a new boar of the next breed obtained.

The crisscross method in beef cattle might utilize the Shorthorn bull on Hereford cows for the first 2 years, then put Hereford bulls in for the next 2 years, and then go back to Shorthorn bulls, and so on. Rotational crossing would require going to Aberdeen-Angus and/or Charolais after the Shorthorn bulls, and then to Hereford before starting over again with the Shorthorn.

The same systems applied to sheep might utilize surplus range ewes as foundation females bred to Suffolk rams the first 2 years, followed by Hampshire rams, and back to Suffolk, etc., or on to Shropshire and/or Oxford, before going back to begin the cycle with Suffolk again.

The systems just described for beef cattle and sheep merely require that the males be changed to the next breed when their daughters are of breeding age. However, if maximum hybrid vigor is to be obtained from a continuous crossing scheme, it would require separation of the female stock into groups for breeding to males of the appropriate breed. This would require a separate breeding pasture for each group. There is the further disadvantage to farmers with small herds, or flocks, of having to keep more males than would be warranted by the number of females. This may not be too serious an objection in the case of sheep, since rams are relatively cheap. In the case of beef cattle it could prove too costly unless advantage could be taken of artificial breeding, which would also overcome the problem of having to separate the herd into two or more breeding groups, as would be the case in natural breeding.

Each of these limitations that confront the "small" operator would be overcome if some breeders would undertake to go into the business of producing the first-class females for sale as breeding stock to the commercial producer, who would make the final cross and market all the offspring. The commercial producer would then be relieved of having to raise his own replacements, and

could therefore carry a larger herd of breeding females, have a much greater turnover, and continue to use the same breeding males as long as they performed satisfactorily.

The middle man in this scheme would likewise purchase female replacements from the breeder of straightbreds. In the case of beef cattle and sheep, the source of straightbred females might very well be the surplus from range herds and flocks now being sold as feeders. Breeders who would specialize in the production of such replacement crossbred stock could very well become an additional and an important segment of our livestock industry.

### Purebred Sires

IT would be folly to use crossbred sires. The reasons are: (1) Crossbred females mated to a sire of the same cross would produce offspring containing a great deal of variability in type and performance. (2) In order to conduct a continuous crossing program, one of the parents must be a purebred, and it is easier and cheaper to replace males than females. (3) Offspring benefit directly throughout the prenatal and pre-weaning periods from the increased vigor of the crossbred mother, but could not derive any such benefit from a crossbred sire.

The utilization of the hybrid female is not a reversion to the old system of promiscuous breeding, but the adoption of a system which is of value only when males of high breeding value are available. We would still need the purebred, in fact more so. Many farmers are still using grade sires, but if they are going to follow a method of continuous crossbreeding, they will have to utilize purebred sires for best results, and so an increased demand for purebred sires should follow.

The purebred breeder has nothing to fear but everything to gain from an acceptance by the commercial producer of these methods of production. But the purebred breeder on his part must assume increased responsibility for the development of high performing, purebred animals. This will require that purebreeders pay more attention to the productive qualities of their stock in making their selections for breeding animals.

The good purebred sire is the basis for the improvement of any class of

commercial livestock. This is equally true whether the producer is following a continuous crossbreeding system or grading-up (breeding males of one purebred to successive generations of females). Crossbreeding will not solve any difficulties or contribute anything to improved production unless good purebred sires are used. Nor will crossbreeding yield the desired results unless the animals are receiving the proper care, feed and management.

### Summing Up

NOW, you will probably say: "Sure it may be all right but you can count on a cent or two less per pound than the straight breed fetches on the same market." This is perhaps true in swine and to a degree in feeder cattle, but is not at all the case in sheep or in fat cattle. Such discrimination as does exist is usually based on the presence of color in the case of swine, and to non-conformity to an accepted color pattern in the case of cattle. But when it comes

right down to dollars and cents, the producer is still ahead because he can market more animals in a shorter time on less feed.

If so simple a procedure as using a male of a different breed will result in a 10 to 12 per cent increase in production, then it is well worth consideration.

You must bear in mind, however, that crossbreeding is not a "cure-all" for every ill causing low production. Nor can every combination of breeds be expected to show improved production. But, certain combinations can be recommended from results already known from trials. There must be a plan and the plan must be followed closely. The quality of the individuals used in a crossing program is every bit as important as the choice of breeds used.

As we said at the start—there's a wonderful opportunity and an exciting prospect for the livestock producer who is prepared to streamline his operation in the light of modern breeding techniques. V

## Death of a Predator

Photo story by ED CESAR

ALTHOUGH guns, traps and snares contribute toward reducing the coyote population, poisons have long been paramount in the control of these predators.

This series of pictures depicts the final moments of a victim of a cyanide gun. More popularly known as the "coyote getter," this device is used widely by game officials, ranchers and trappers in anti-coyote campaigns.

The gun is so designed that by pulling on a baited head, the mechanism is triggered and releases deadly cyanide gas from a cartridge directly into

the predator's mouth, killing him in a matter of seconds.

To allay the predator's suspicions, the baited head, which is usually composed of rabbit fur, is the only part of the device showing above ground. It is smeared liberally with a fetid concoction consisting of such ingredients as fresh blood, various oils, canned fish and animal parts.

Cyanide guns are excellent for their purpose, as the pictures show, but they are dangerous. They must be handled with care and set where no person or domestic animal can trigger them accidentally. V



Coyote approaches cyanide gun, following the scent with nose held high.



He triggers the gun, gets a mouthful of cyanide gas, rears back too late.



Befuddled, he dashes away, staggers, weaves and collapses 100 yards away.



The predator is dead, about 45 seconds after contact with cyanide gun.

## Guide to

## Seed Treatments

## for Cereals and Flax

## WHY

SEED grains need protection against fungus disease organisms in the soil, or those carried by the seed itself; also against damage by insect larvae.

The diseases include smuts, seedling blight and seed rot; the principal insects are wireworms and seed-corn maggot.

Smuts—covered and false loose smuts, including bunt, are carried on seed; chemical treatments give control.

—common or true loose smut is carried within the seed; chemical treatments are not effective, but some water treatments are.

Seed Rot—cracks in the seed coat allow soil-borne disease organisms to enter, germination is impaired; chemical treatments are effective. They also help to control seedling blight, a root and leaf disease.

In all cases where the need for seed treatment is in doubt, laboratory tests of seed samples will indicate whether disease control is called for.

Insects—larvae cause most damage in the seedling stage, and particularly in summerfallow crops; chemical treatments are effective.

## WHAT

THERE are several reliable chemical products for seed treatments on the market. Sometimes the fungicide for disease control and the insecticide are combined in one treatment. Here is a run-down of the main types:

Mercury compounds protect seed against bunt of wheat, loose smut and covered smut of oats, covered smut and false loose smut of barley; also control seedling blight and protect damaged seed against soil organisms.

Hexachlorobenzene or pentachlorobenzene products are for bunt of wheat, but not for oats, barley or flax.

Captan products are effective chiefly against seedling blight and seed rot.

Formaldehyde is effective against some seed-borne diseases, but is not recommended because it can harm germination, especially in wheat.

Benzene hexachloride (BHC), aldrin, lindane, heptachlor and some other insecticides protect seed against insect larvae such as wireworms.

Check the seed treatment you buy to make sure it is right for your purpose.

Seed treatment chemicals may be bought as dusts, liquids or slurries. Liquids reduce the discomfort to the operator caused by dusts, but it takes more care to get thorough coverage of seed with liquid.

## HOW

SEVERAL types of equipment are available for treating seed. Many farmers use ordinary grain augers for the purpose, but there is disagreement at present as to the efficiency of the auger method. For those who use augers, the following advice will increase the chances of doing a thorough job:

- Control the flow of seed into the auger by using a fanning mill, a hopper with adjustable slide, or a metering device, so the auger is operating at about half its normal capacity.
- Reduce the speed of the auger to improve the tumbling action and lessen the grinding effect.
- Retard the movement of grain, if necessary, by splitting one or two of the auger's paddles.
- Follow exactly the manufacturers' operating instructions for treaters which are often supplied with the chemicals.

Aside from the problem of obtaining thorough coverage of seed, the main disadvantage of an auger is that chemical resi-

dues in it can contaminate other grains. Clean the auger thoroughly after use, or have a separate auger for seed treatments.

Some authorities say the best treatment is at the seed cleaning plant after seed has been cleaned. This ensures complete and even treatment that penetrates and lasts. It also leaves screenings untreated and they can be used for feed.

True loose smut, which doesn't respond to chemicals, can be tackled with hot water treatment: soak seed in water at 70°F. for 5 hours, dip in water at 129° (126° for barley) for 11 minutes, cool immediately in cold water, dry the seed.

For *barley only*, there is the water-soak method—seed is placed in 1 per cent salt solution at 70° for 75 hours, or 76° for 60 hours, or 86° for 35 hours, then dried and stored; and the dip-and-pile method—seed is soaked in water at 76° for 2 hours, drained and enclosed in an airtight container at 76° for 65 hours, or 86° for 35 hours, then dried and stored.

## WHEN

WHEAT, rye and flax should be treated at least 24 hours before seeding; barley and oats at least a week before, unless the manufacturer states otherwise.

Organic mercury treatments can be given several weeks ahead of seeding, if storage conditions are good and moisture content is normal. Seed with high moisture content may be

injured by mercury compounds if it is stored for several weeks after treatment. Generally, it is not advisable to treat seed more than 3 months before sowing.

Dual-purpose treatments (fungicide plus insecticide) may be applied at any time before seeding, but continued storage in warm conditions can injure the seed.

## WARNINGS

- Chemically treated grain, or grain tainted accidentally, is a threat to human health. It is an offense to sell it through an elevator. It is also dangerous to feed it to livestock.
- Treated seed should be stored in a ventilated or open building because the vapors are poisonous.

- If seed is not colored by treatment, tag it plainly to avoid mistakes.
- Wear a dry mask when handling mercury compounds. Place the treating apparatus where wind will carry dust or fumes away from you. Brush clothes and wash hands and face carefully after handling treated seed.
- Keep children and livestock well away from treated seed.





*Puss, well aware that you have designs on him, watches from a spot that he has for such occasions.*

# PUTTING PUSS OUTSIDE

Picture Story by  
**ERIC WALHEEN**



*After a while, he may forget you are planning to throw him outside and decides you want to play with him. Here is a chance for you to sneak up on him—maybe.*



*Squeezing down to cat level leaves feet waving in mid-air. Puss comes over to examine the situation while you are in no position to nab him.*



*This is it! Puss has grown careless, forgetting what you intend to do with him. So now your dastardly trick makes him mad, but it's all in vain. The game is up!*



*With tempers ruffled, puss is cast out and you don't care if he never returns. So he retaliates with uncomplimentary mutterings to himself.*



*Eventually, puss is bored and wants to start over again. And why not? It's his home, too.*

**Y**OU can see how it is. Catching the cat when you want to put him outside is almost a full-time job. It involves strategy and maneuvering on both sides, proving beyond a doubt that this animal is smarter than you had allowed.

It's a lucky coincidence when both you and puss decide simultaneously that he would be better outside. But how often does that happen? Most of the time the whole thing is strictly your own idea.

Puss will take a dim view of your efforts to drive him out into the great outdoors. His tricks to counter your threat mark him as a master of the game of hide-and-seek. But you are going to show him who's boss — or are you?

V

# They Farm North of the Peace

*The Loucks had a transport problem but the P.G.E. has changed all that*

by CLIFF FAULKNER

TURNING the family farm into a corporation isn't all gain—especially in these days of acreage payments and grain delivery quotas. That's what the Loucks family of Baldonnel, B.C., found when they decided to incorporate their Peace River mixed farming operation as Loucks Farms Ltd. Now they have a 4-way partnership where Bill Loucks, his wife Vera, and sons Ewart and Gilbert farm about 600 acres as a single unit. But this has reduced their grain delivery quota to one permit book.

Ewart Loucks (who was a 1960 candidate for a Nuffield Scholarship) points out another disadvantage. "Under the new set-up we also lose on any PFAA payments," he said. "To be eligible for these, each shareholder must farm a minimum of 200 acres."

But the family doesn't regret turning their farm into a company. Although it cost them \$400 in legal fees, it put their operation on a business basis. Before that, nobody knew how much each should take out for personal expenses.



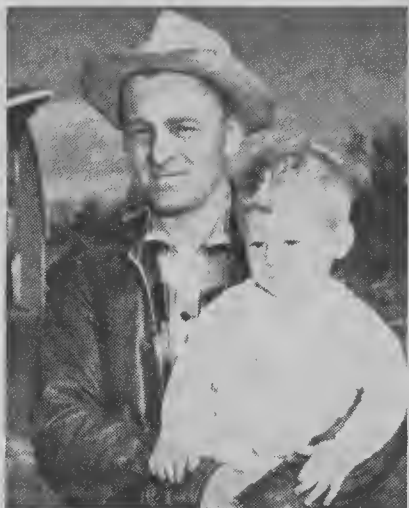
Gilbert bulldozing a drainage ditch.

WHEN Bill Loucks left his home in southern Saskatchewan in 1931 to seek a new life in the Peace River country, he found all the good land had been filed on. However, Bill knew a former Saskatchewan farmer who had decided to quit his homestead, so the Loucks family took over.

"There were no improvements on the place," Bill recalls. "But we had a small portable sawmill so we were able to cut lumber for new buildings. We cut a bit for other people in the district too. This whole area had been burned over at one time

which meant heavy second growth to clear before we could do any farming. If it wasn't for those early fires, though, nobody could've settled this country."

The biggest problem for Peace farmers was transportation, especially for those north of the river. Bill winter-hauled his grain 60 miles to the Dawson Creek railhead with four horses and a sleigh. A ferry took them across the stream at Taylor Flats. After that, they faced a grim 5-hour haul up Peace River hills before they could win clear of the valley. The return trip to Dawson Creek took a full week. In 1937, the last horse haul was made, and trucks took over.



Ewart poses for picture with Sandra.

At first, all grain was handled by a trucking firm, working under contract. Six years later, local farmers decided they were paying too much for hauling, and started a co-operative trucking venture. When this scheme collapsed after about a year of operation, the Loucks bought their own truck. Now that the P.G.E. railway has been extended north of the Peace, however, transportation is no longer a problem.

TODAY, the family run a mixed farming operation on just under 600 acres. During an average year they raise some 25 head of beef cattle. These are finished on the place and marketed in Edmonton through a local co-op shipping association. Feeding starts early in October and continues until about May 24 of the following year. In addition to cattle, they raise 150 hogs. These are sold in Vancouver.

The Loucks work on a 2-year grain-grass rotation. About 100 acres



Bill Loucks stands before the first building erected when he took over.

is sown to wheat, 110 acres to barley and 100 acres to creeping red fescue. Another 140 acres is summerfallowed. Their forage contains a good deal of clover, although they never seed any. All they have to do is put in the grass and they get enough volunteer clover growth to make a good mixture.

"Creeping Red Fescue is a good crop for this country," said Ewart Loucks. "We get seed from it most years and the stubble makes wonderful pasture. Trouble is, there's no money in it these days. When the American Government started to subsidize their growers, our price dropped from a dollar a pound to 35 cents, and then down to 8 cents."

Both Ewart and Gilbert have been able to tide the farm over a few rough spots by doing a bit of logging in the winter. The help this has been to the Loucks' operation is a strong argument in favor of farm woodlots. This is an "extra crop" which every farmer living in a forest area should investigate.

## Move Toward Better Seed Grain

ACCORDING to Saskatchewan's annual seed grain survey, only about 24 per cent of the province's farmers clean their grain at elevators, and this is the lowest percentage since the seed grain survey started in 1953. Examination of seed over the past 8 years had shown that elevator-cleaned seed contains most weeds and grades rejected most often.

The survey showed 34 per cent of the seed samples from 290 farms were poor enough to be rejected, compared with the 8-year average of over 42 per cent. The main reason for rejection was the presence of weed seeds and other grains. Less than 1 per cent was rejected for poor germination or poor quality.

Over 21 per cent of samples were infected with smut, a reduction from the 25 per cent smutty wheat of the past 8 years. Over 95 per cent of farms sampled were growing recommended varieties, but only 2 per cent of the seed was registered and certified.

Vic Beck of the Saskatchewan Department of Agriculture sums it up by saying farmers are moving toward better seed. Besides registered and certified stocks, the best grain seems to be home-grown. Grain bought from other farmers appears to have a larger amount of weed seeds in it.

ask the man  
who owns a  
**Badger**  
**BARN  
CLEANER**

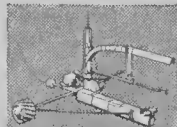


... for PROOF  
that BADGER QUALITY  
pays a Bonus in Long Life,  
Low Upkeep and Dependability

No one knows better than a Badger user the importance of the extra quality and muscle Badger builds into a barn cleaner. From the all spur-gear transmission to the rugged, forged-link chain, every part is carefully made to deliver peak performance day-in and day-out for years. — to save your pocketbook while saving your back! There's a Badger for every size and type barn. See your local Badger dealer now — he'll put you in touch with several users in your area.

## Buy EARLY and SAVE!

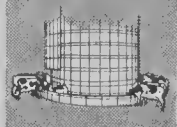
There's a big cash saving if you order now for later delivery and installation—and if you have the cash to buy outright, your money will earn you a substantial dividend! Ask your Badger Dealer about this plan that rewards you for buying early... and the earlier you buy, the more you save.



**SILLO UNLOADER** —  
Handles any silage  
any weather. Silos 10  
to 30 feet.



**AUGER FEEDER** —  
Low cost feeding sys-  
tem for grass or corn  
silage.



**ROUND-THE-SILO  
FEEDER** — Low-cost auto-  
matic, free-choice si-  
lage feeding, for silos  
12 to 24 feet. Utilizes  
otherwise wasted  
space.



"Pay as You Save  
Plan" available

**Badger**

BADGER NORTHLAND, INC.  
Kaukauna, Wisconsin, U.S.A.  
Distributed by



**DE LAVAL**

DeLAVAL COMPANY LIMITED  
Dept. CG, Peterborough, Ont.

Please send literature on:

☐ Barn Cleaners ☐ Bunk Feeders  
☐ Silo Unloaders ☐ Feedlot Layout  
☐ Making Grass Silage

Name .....  
Address .....  
City and Prov. ....

**SEND FOR LITERATURE!**

Canadian **P**ropane

'HI NI  
FEATURING  
1961

Here's a real bargain

**\$100.00  
OFF**

**MOFFAT  
JANITROL AUTOMATIC  
GAS FURNACE**

Model FVBB-80

**NOW \$175.00**

Ten year guarantee on exclusive  
Moffat heat exchanger. Fast, clean,  
dependable heat for pennies a day.  
Buy now on our easy 5-year Merit  
Plan. No payments until next  
October!

**Canadian**

Canadian

PROPANE AND NATURAL GAS

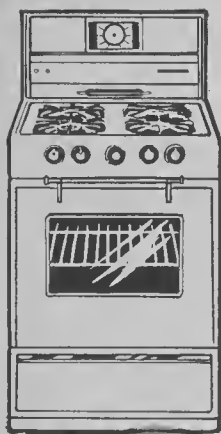


# NEIGHBOUR' SALE MOFFAT GAS APPLIANCES

GENUINE REDUCTIONS - GIANT SAVINGS

Get acquainted with your neighbourly Canadian Propane dealer. It will pay you, because—for one month only—February 15th to March 15th, during our 'HI NEIGHBOUR' SALE, he is selling NEW 1961 MOFFAT propane and natural gas appliances at genuine price reductions. Prices are slashed, way below dealer level. Come in, compare—and remember, all gas appliances can be used with either propane or natural gas. Visit your nearest CANADIAN PROPANE DEALER SOON!

## 25% OFF ALL APPLIANCES



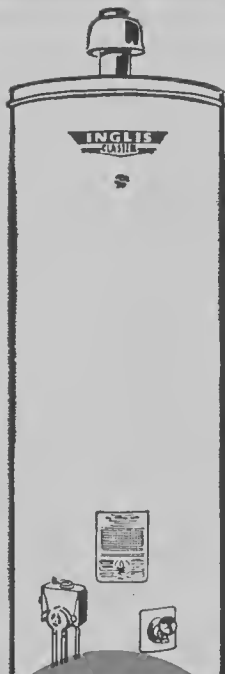
Regularly  
\$279.95

**NOW**  
**\$209.95**

Model  
48F70W

### MOFFAT RANGES

Here's a once-in-a-lifetime deal... Canada's No. 1 range with Hi-Lo Speed Burners—fully automatic oven ignition with 100% safety shut-off—king size oven with optional picture window oven door—silent glide broiler. All "exclusive" gas features. See it, buy it for less at your nearest Canadian Propane Limited dealer NOW!



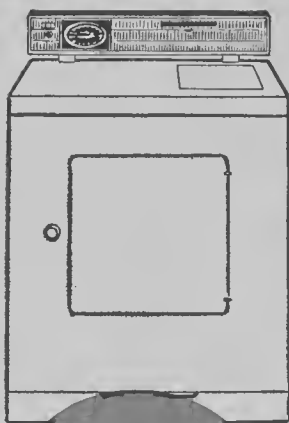
Regularly  
\$99.95

**NOW**  
**\$75.00**

Model IG-24

### INGLIS WATER HEATER

Hot water at the turn of a tap... for such a little bit of money. Inglis "Glasteel" hot water heater with exclusive glass lining has a FULL 10 year guarantee.



Regularly  
\$299.95

**NOW**  
**\$224.95**

DG-G-220

### MOFFAT DRYERS

Clothes drying problems disappear when you own an automatic Moffat dryer. Gentle fluff-and-tumble action ends clothes fading, stretching. Best of all, you dry your clothes for just pennies a month.

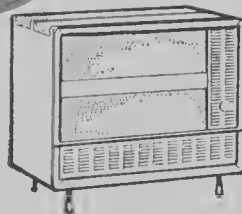
Regularly  
\$153.95

**NOW**  
**\$115.50**

Model CVC-35-IT

### TEMCO SPACE HEATER

Thermostatic control for constant comfort. You have never seen this Temco Space Heater at such a low, low price. Efficient propane provides clean, odourless heating for you home.



## RENT A TANK!

**ONLY \$4.00 PER MONTH**

for a 500 gallon tank — \$5.00 per month for a 1000 gallon tank. Save the money you would normally spend on buying a tank and invest it in other wonderful Moffat appliances. Only at Canadian Propane can you EITHER RENT or PURCHASE your propane tank and receive guaranteed delivery at a stabilized price. Visit your neighbourly Canadian Propane Dealer NOW!



**Propane**  **Propane**

S APPLIANCE SPECIALISTS

## Grass Tetany From Some Forages

GRASS tetany has been occurring quite significantly in Ontario herds during the past year or two. It was reported mainly in dairy herds with a high number of newly freshened cows, according to Dr. D. C. Blood of the Ontario Veterinary College.

Grass tetany, or grass staggers, is caused by a shortage of magnesium in the blood. Apparently, it is influenced by three types of forage; a high grass mixture; a green oat pasture, hay or silage; and pastures heavily fertilized with nitrogen.

Look for animals that stagger, balk, fall down, or bellow, advises Dr. Blood. Some of them show these symptoms for days before entering a convulsion; others can go into a convulsion and die within 10 minutes of showing the first signs of tetany.

Control grass tetany by feeding 2 oz. magnesium oxide (2 heaped tablespoons) per animal per day. Mix it in the concentrate. Call the vet. if you suspect tetany, and he will give a preventive injection or treat affected animals.

Watch particularly during cold, wet springs. Keep a little dry hay in pastures at all times. V

## IN THE SERVICE OF AGRICULTURE



### THE 4-H LEADER

is a local leader in his community who is devoting his time to the training of youth. By giving the young people a better understanding of the various phases of agriculture, he is helping to develop Canada's farmers of tomorrow.

### OUR LOCAL MANAGER

is another man who knows his community well and helps it to develop. He will gladly show you how your farm management will benefit from wider use of the complete banking service we offer. Call in and see him next time you're in town.

## CANADIAN BANK OF COMMERCE

Call us your bankers

FN-41

# Through Field and Wood

No. 29

by CLARENCE TILLENIUS

ABOVE timber-line in the western mountains and on the tundra plateaus of Alaska and the Yukon live marmot, eagle and grizzly. Of these grand wild solitudes the grizzly is overlord, and here he is most likely to be encountered. To the lone hiker a disquieting thought sometimes comes. What if I suddenly stumble on a grizzly?

Many men have run onto grizzlies: the accounts would fill several books with no two experiences the same. Be it said though, the chances are far greater of a bite from a dog while wandering around the city than of being molested by a grizzly while wandering in the mountains. Keen-nosed, sharp-eared, the grizzly usually senses your approach and departs unsuspected. Still, encounters between man and grizzly do happen and no one denies that a dog's bite does not compare with a clout from a grizzly for permanent effect.

No one, really, knows exactly what a grizzly may do at such a time nor, without experience, can you be sure what *you* will do either. Grizzly eyesight is poor. He may see you without knowing what you are. In that case he may come toward you to see more clearly or walk around you to get your scent. This is natural curiosity, not hostility. But don't let optimism carry you away. There are mountain men living—and several dead—who paid a heavy price to learn not to rely heavily on a grizzly's good nature. Circumstances never come twice alike, but related below is a more or less typical meeting with a grizzly. Draw your own conclusions what might or might not have been the outcome.

Last fall, four of us were exploring a saddle between two ranges in the Yukon looking for Dall sheep. Dave Johnston was showing me some tundra vole tunnels when Joe Langevin and Stewart MacDonald came up with the news that a grizzly was lying asleep on a meadow a half mile away. They had watched him from the rim. Rare chance for study—a grizzly asleep! But it was a long climb. When we got there the grizzly had ended his nap and was digging ground squirrels. Joe set a 30-X scope on a tripod so I could study and sketch the bear at long range. We



were near a hilltop, heads only showing above the crest. The bear was 600 yards off but soon saw us and came in our direction.

Every so often as he passed a squirrel den, a smooth flick of the mighty forepaw tore out a bushel of sod and the blunt muzzle thrust deep in the tunnel, to an anguished chorus of yelps from neighboring ground squirrels. Shaking dirt from his head, he stared at us again and came on. We took some photos and I had made several sketches. He began edging around to the right to catch our scent but was now within 80 yards and coming steadily forward. Joe said, "Fellows, he's getting mighty close. If he gets the notion, he can cover the ground between us in less than 10 seconds. I don't want to have to shoot, and he *may* take off in a hurry when he gets our scent, but if we stay here and he comes up over the ridge he'll be among us before he knows what we are. If he gets excited and starts trading haymakers it's no guess with me who'll feel it the most. I vote we gather our stuff and vamoose."

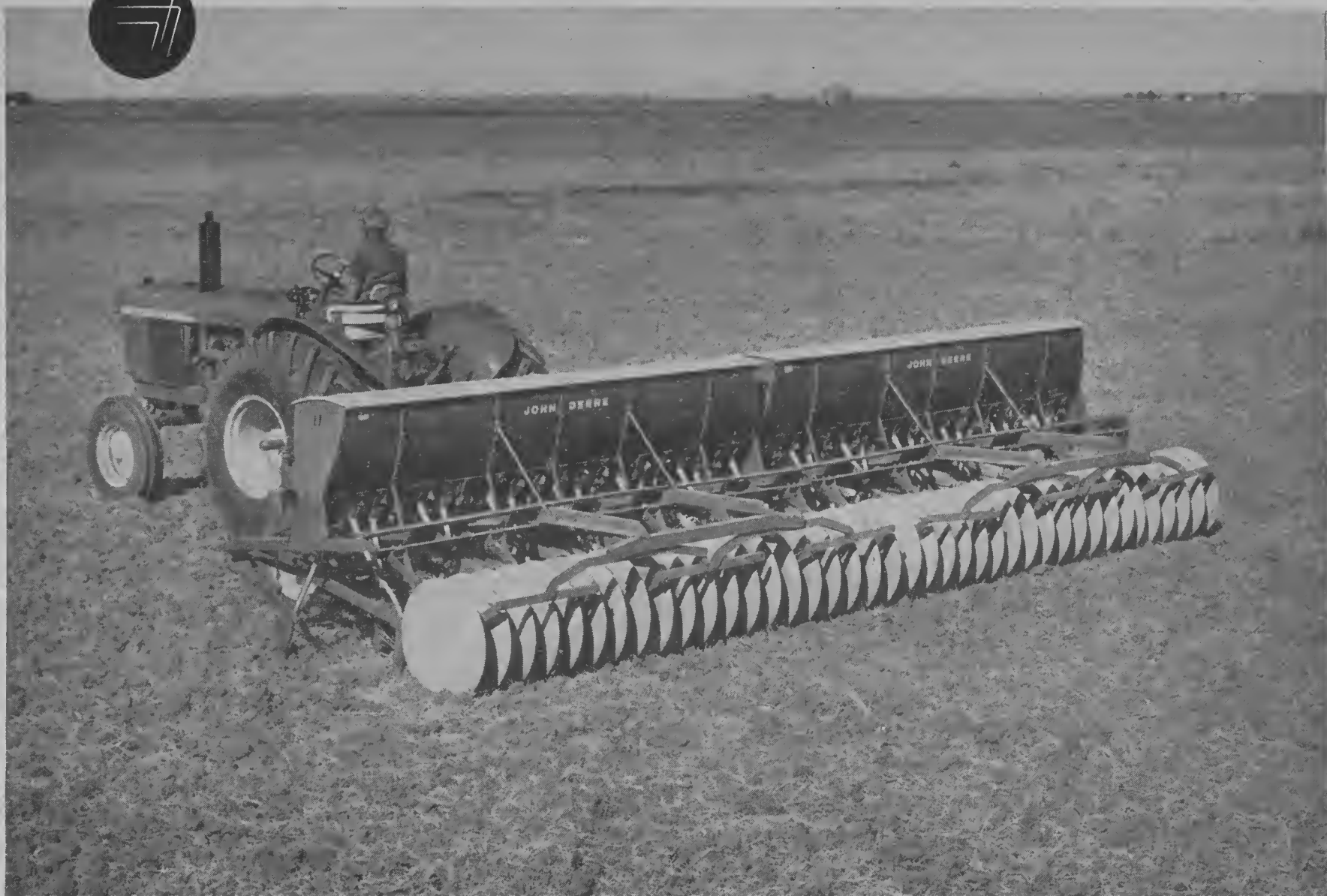
WE agreed this was as sound a piece of philosophy as we had yet heard and departed with dignity. From 100 yards further up the hill we looked back to see the bear still striding steadily our way. Perhaps he would soon have turned back, but had he not, for us to invite a charge and then shoot him for doing so seemed hardly the way for uninvited guests to behave. We went down the other side and across the valley, leaving him the field. Probably he still roams there where anyone wishing to take up his study where we left off can look him up.

He was not too good-looking anyway. His right ear had been torn off, probably a fight with another bear. Fur not frosted or grizzled but uniform smoky gray-brown or mouse-colored without the dark legs and roach some grizzlies show. A heavy ruff under his chin. His arrogant stride, scowling stare and ragged battle scars dampened the desire for arm's-length scientific inspection. Yet it may be that, seeing few visitors, he only wished to pass the time of day. We gave him the benefit of the doubt. V





*More partners for the New Generation of Power:*



Measure the performance of this John Deere LZ-B Mulch Hoe Drill in extra bushels at harvest time.

## INVEST IN A JOHN DEERE... you'll have a better drill for a longer time

John Deere LZ-B Mulch Hoe and Lister Drills are better because they have all the features essential for producing top yields in areas of marginal moisture. They have adjustable-gate fluted force-feeds that assure dependable, non-skip planting accuracy on steep hillsides. And they have jackknife spring-pressure furrow openers easily adjusted to give deep penetration for placement of seed in moist soil. Yet, these openers have plenty of flexibility to follow seedbed contour and maintain a uniform depth of planting.

With either 7-inch Mulch Hoe or 10- or 14-inch Lister openers, ample fore-and-aft clearance is provided so you can plant in heavy stubble mulch without time-wasting "raking" and clogging. LZ-B Drills have flexible press gangs that follow the lay of the land, dual drives for constant rate of seeding, and a choice of five different types of 26-inch press wheels for better compaction and lighter draft. LZ-B Drills have tapered box ends—a must for satisfactory squadron operations.

See for yourself at your John Deere dealer's how high-quality materials and creative engineering are put together to make a John Deere LZ-B Mulch Hoe or Lister Grain Drill your best buy.

### JOHN DEERE LIMITED

CALGARY  
REGINA  
WINNIPEG  
HAMILTON

**JOHN DEERE design, dependability, and dealers MAKE THE DIFFERENCE**







## Fly Control That Really Works

THE secret of controlling flies around farm buildings is to keep the barns and barnyard clean and heavily sprayed with a good insecticide. That's the view of John Dalrymple, livestock specialist and farm manager at the Kemptville Agricultural School, Ont. He does just that at Kemptville and reports

that flies haven't been a problem. "You must apply a heavy spray of insecticide though," he warns.

Biggest fly problem usually is found in the pig pen. Dalrymple sprayed half his pig pen with diazinon, the other half with malathion last year, and both were effective. He soaks the surfaces, particularly around the windows, until they drip with the spray. He uses a pressure sprayer for this. "You'll soon be sweeping up pans of flies underneath the windows if you spray heavily enough," he says.

Fly control in the dairy barn begins in early June. He soaks the stable walls with spray, then soaks any outside walls that the cattle normally approach. Flies from the cows

will try to settle on these too. Of course, he keeps cows away from the sprayed areas until the spray dries.

This June application should last until the first of September, when he says another coating will be needed. He uses a knapsack sprayer to apply it. The only other requirement, in addition to keeping the place clean and leaving no manure around, is to dust the cows with an insecticide every 2 or 3 weeks. He used methoxychlor for this last year. He dusts young cattle too.

There are a few other problem areas around most farmyards. Bulls run loose in the test barn all summer at Kemptville, providing an ideal fly breeding area. Dalrymple cleans the manure out of this barn frequently,

and sprays the walls every 3 weeks, again keeping the bulls away from those walls until the spray dries.

There's an open shed that remains empty all summer on the farm, and he prefers to leave the manure pack in it until fall. This pack could be a breeding ground for flies too, so he soaks the surface of the pack with a good spray in the spring.

Grass silage, especially that made in bunk silos, can present a good fly breeding area too. The answer to this, he says, is to cover the silage with plastic.—D.R.B. V

## Some Tips On Handling Wool

PROPER handling can increase the value of wool. Here's what the U.S. Department of Agriculture suggests:

- Shear when wool is dry.
- Shear on a clean, dry surface.
- Take tags, dung locks and stained pieces out of fleece, and bag separately.
- Shear brisket and belly wool first, and if there are such things as burrs in the wool, pack it separately.
- Pack short face and leg wool separately from body wool.
- Remove fleece in one piece.
- Avoid second cut by shearing close to the skin.
- Tie fleeces with paper twine (sisal, jute and hemp may leave their fibers in the wool). Tie each fleece separately.
- Roll fleece with flesh side out, and not too tightly. But pack it tightly into a wool bag.
- Mark each bag with your identification, bag number, weight and kind of wool (ewe, ram, yearling, etc.).
- Store bags in clean, dry place.
- Brand sheep with approved scourable fluids only. V

## Don't Poison Your Livestock Too

DON'T use barn sprays directly on livestock. It can frequently cause the death of cattle, and it will certainly make them sick. Dr. Howard Neely of the Ontario Veterinary College says affected animals usually slobber, the eyes become swollen, the tongue may hang out of the side of the mouth, and sometimes there is shivering.

In one herd, 30 per cent of the cattle were lost within 24 hours from this cause.

Dr. Neely says some herbicides can be a problem too. Sodium arsenate is intended to kill potato tops, but it will also kill cattle if they eat the tops, or if the wind carries the spray to pastures and lanes. He recalls having seen seven big steers dead in a barnyard one day as a result of spray drift.

Farmers should read the directions carefully before they use poison sprays, whether in the barn or the field. Also, custom operators should be careful with sprays around farms and ought to warn farmers of the dangers. V



## Albert and Clarence Tiemstra find that 5,000 LAYERS CAN'T BE WRONG

With a present flock of 4,000 caged layers, Albert and Clarence Tiemstra of Neerlandia, Alta., are among the province's top egg producers. Good management has built their thriving egg business to its present size and they are continuing to grow (5,000 layers next year.)

Here are some production figures to show that the Tiemstra's management and feeding program is pretty near right!

- Birds in full production at 5 months
- 92% production in the third month
- 60% production after 12 months of laying
- 99% of entire production Grade A

"For performance, production and quality, we're feeding "Miracle" Feeds. It's the best", say the Tiemstras.

### 'MIRACLE'

#### FEEDING PLAN FOR LAYERS

Caged layers produce under certain stresses. Their feed must be formulated to keep them going under these stresses. "Miracle" All-Mash Laying Crumbles has everything a caged bird needs to keep it working at top capacity month after month. A "Miramix" cage laying formulae (made with your own grain) does an equally good job. -



Across Canada Profit-making Feeders Choose "Miracle" Feeds

## "MIRACLE" FEEDS

THE OGILVIE FLOUR MILLS CO., LIMITED  
VANCOUVER • WINNIPEG • MONTREAL

LIVESTOCK

# Lacombes Enter Next Phase

THE fifth and final distribution of Lacombe swine under the direction of the Lacombe Experimental Farm, Alta., was made last fall. This completes a phase of the original purpose, which was to produce a white, bacon-type breed, which in crosses with the Yorkshire would yield high quality bacon and show hybrid vigor in the form of accelerated growth rate. The Lacombe was based on a combination of Landrace, Chester White and Berkshire.

Registration requirements for Lacombes are strict. Boars cannot be registered unless their litter mates or parents have produced high quality carcasses efficiently, and have shown fast growth under test. This means that all breeders of pure-bred Lacombes have to test under R.O.P. all the females that they use in their breeding herds. If they fail to test one female, they cannot register boars from that female.

When the distribution program was ended last year, Dr. Howard Fredeen of Lacombe said: "We believe that with the number of private breeders (about 125) raising pure-bred Lacombes, the breed is now on a firm foundation. An estimated 3,000 Lacombe pigs now eligible for registration are owned by these breeders."

The project is not now at an end. Problems of selection are receiving continued attention, and there will be an examination of methods for accelerating improvement of feed efficiency. The foundation Lacombe herd is providing the experimental population. Surplus boars from this research will be available to breeders of Lacombe swine, but the majority of breeders will be expected to raise stock, or buy from other breeders. ✓

## Quebec Test Favored Shorthorns

WELL - FINISHED, Shorthorn steers were ready for market in the spring at 23 months, while Western-bred Aberdeen-Angus and especially Hereford steers were best marketed in the summer at 28 months. The Shorthorns graded considerably higher than the other two breeds at 23 months, but this was not the case at 28 months.

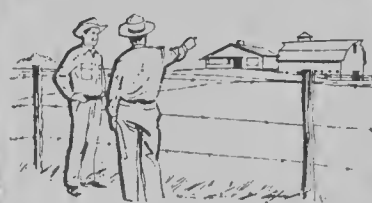
These were the conclusions drawn by Gaspard Lalande from a test at the Lennoxville Experimental Farm, Que. Similar feed and management were given to 65 Shorthorns bred at Lennoxville, and 59 Angus and 86 Herefords bought in the West.

Each breed was divided into 3 groups for marketing at 23, 25 and 28 months of age. The percentages of steers grading "choice" and "good" in each breed for the 3 ages were: Shorthorns 90.0, 90.5 and 86.4; Aberdeen-Angus 63.1, 65.0 and 80.0; Herefords 42.9, 65.5 and 86.2. The averages for the 3 ages were: Shorthorns 89.2 per cent; Aberdeen-Angus 69.5 per cent, and Hereford 65.1 per cent. ✓



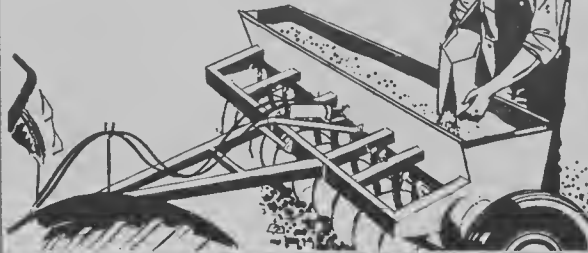
# NORTHWEST FERTILIZER TELLS ITS OWN STORY!

Former Green, one day lost Morch  
Thought "You know, it's funny;  
Seems no matter what I do  
I never make much money."

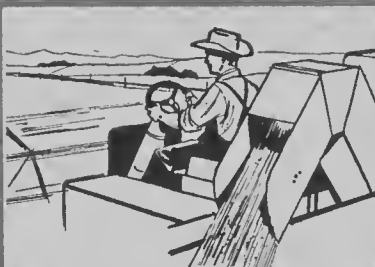


So he decided, as a test,  
To fertilize, and chose NORTHWEST  
And straightway, that very day  
Stocked up. The test was under way.

And he decided — he was wise —  
One strip he wouldn't fertilize  
That strip would show, and he would know  
If NORTHWEST really helps crops grow.



It wasn't long from seeding-time,  
Results began to show,  
The strip he'd left unfertilized  
Was obviously slow!



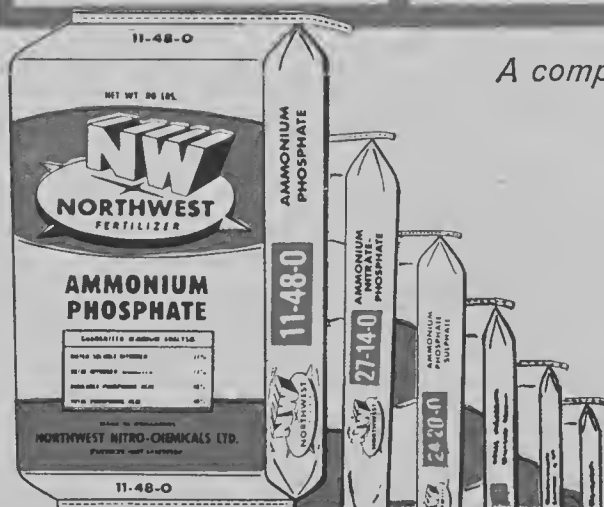
And long before his neighbors —  
Ten days to be exact,  
Former Green was harvesting  
A top-grade, top-yield tract!



The moral here is clear to see;  
If more successful you would be.  
For bigger yield and better grade,  
NORTHWEST means more profit made!



Here's the writing on the wall —  
Order NORTHWEST in the fall.  
Farmer Green has proved it's wise  
To buy NORTHWEST — and fertilize!



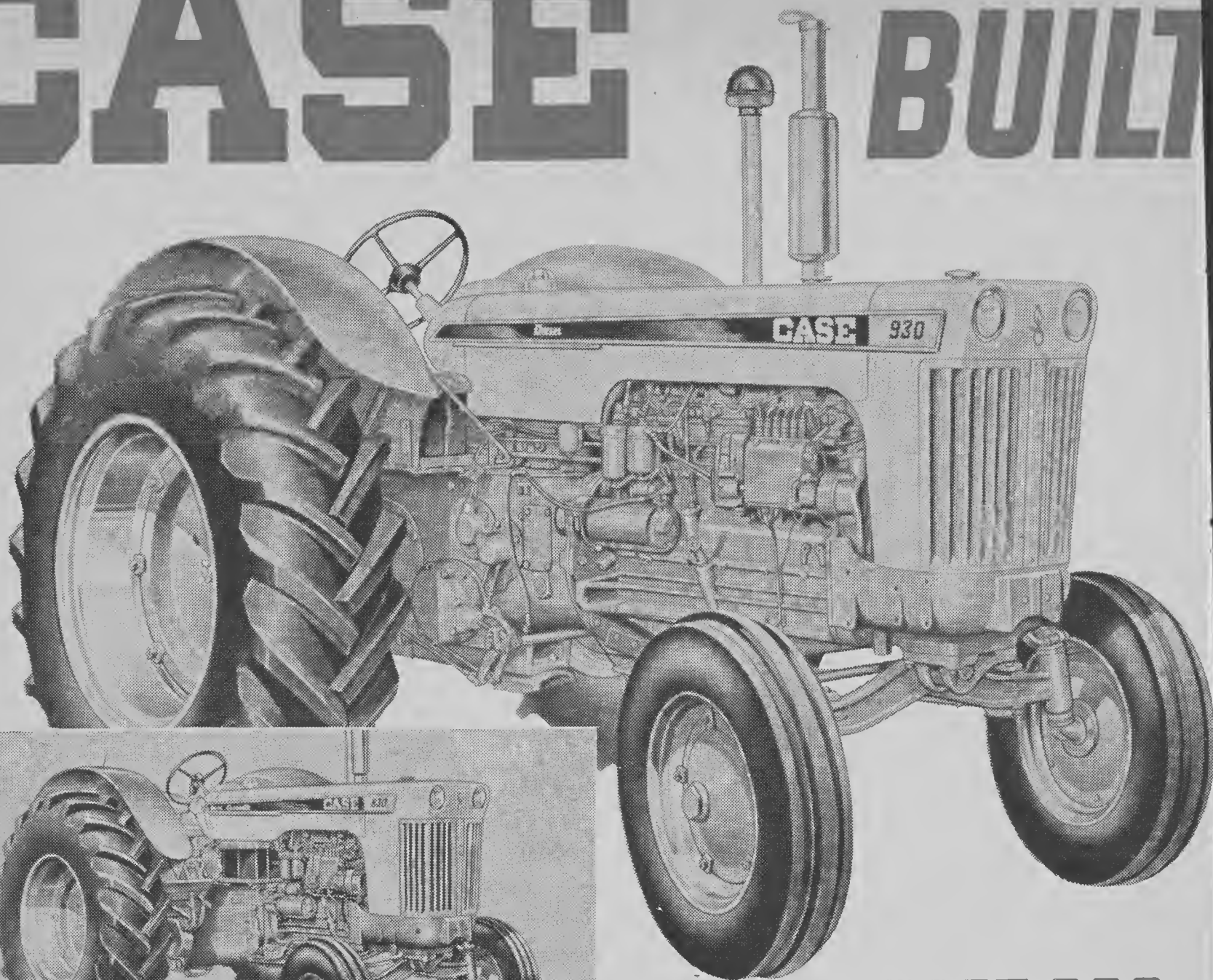
## A complete family of fine FERTILIZERS

- 11-48-0 Ammonium Phosphate
- 16-20-0 Ammonium Phosphate Sulphate
- 27-14-0 Ammonium Nitrate Phosphate
- 24-20-0 Ammonium Nitrate Phosphate
- 33 5-0-0 Ammonium Nitrate (Nitro Cubes)
- and the NEW
- 23-23-0 Ammonium Nitrate Phosphate

**NORTHWEST**  
Nitro-Chemicals Ltd.  
MEDICINE HAT • ALBERTA • CANADA



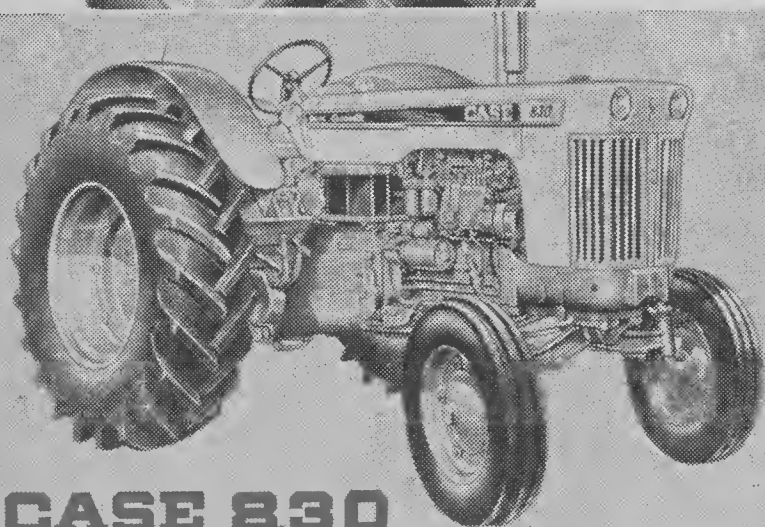
# CASE BUILT



## CASE 930

### ... 6-plow diesel

Big, 6-cylinder, 83 H.P. engine has exclusive Powrcel combustion for smooth operation, top fuel economy, instant starts in any weather. Features six forward speeds, 7 main bearing crankshaft, dual-control hydraulics.



## CASE 830

### ... 5-6 plow diesel

Rugged, 301-cu. in. engine delivers 66 H.P. Choice of Dual-range transmission with 8 forward speeds . . . or famous Case-o-matic Drive that *automatically* doubles pull-power for tough spots . . . *without* clutching or shifting. Six models. Gasoline or LP-gas engines also available.

• CASE 730 . . . 5-plow, 58 H.P. Diesel also available.

## CASE DYNACLONIC TRACTOR SETS NEW DIESEL ECONOMY RECORD

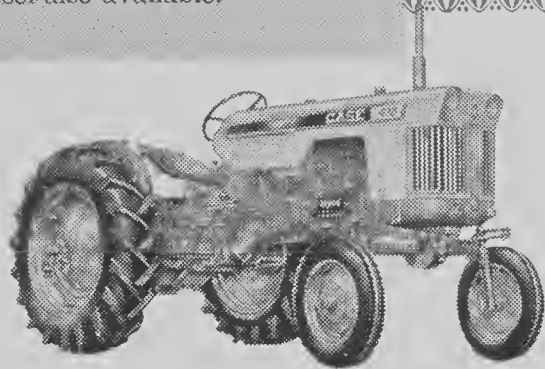
Official tests show Dynaclonic diesel economy all-time best in 30-45 h.p. class.\*

A production model Case 530 DYNACLONIC Diesel Tractor has just recorded the *lowest* fuel consumption of any diesel tractor ever tested\* in the 30-45 H.P. class (.434 pounds of fuel per b.h.p. hour).

Among current model tractors, others in this same power class used as much as 25% MORE fuel!

In this same official test, the 530 demonstrated exceptional pull-power as well, with maximum drawbar pull of 6100 lbs. . . . up to 2199 lbs. more pull than comparable tractors.

\*as of November 1, 1960



## CASE 430

An ideal second tractor for big farms. Compact 3-plow power; turns on a dime; 35 H.P. Dynaclonic engine; gives record-setting fuel economy. Standard 4-wheel, dual front wheel or adjustable front axle models. Larger 530 and 630 Dynaclonic models also available.

**NEW FOR '61!**  
**CASE 430**  
**DYNACLONIC**  
**DIESEL**



# FOR THE BIG JOBS

## ...Powered for Economy on All jobs!

New CASE Diesels for '61 are built big and rugged...with all the brawn it takes to walk through your big acreages. And their heavy-duty Case-built engines are famous for the kind of fuel economy other tractors just don't match!

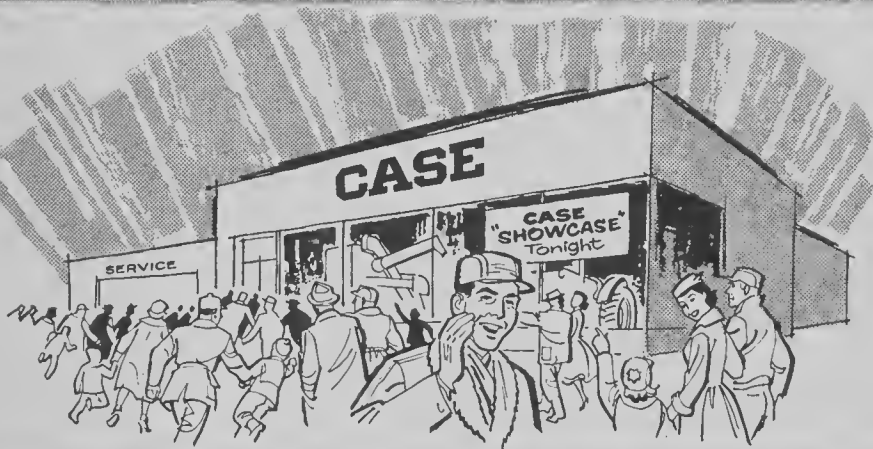
If you farm on a big scale, you want a tractor that's engineered from the ground up for *your* kind of farm work. That's why more and more Western farmers these days are making their move to CASE Diesel Power.

From the heavy-duty forged axles to the roomy, deep-cushioned seat...every part of a CASE Tractor is built to take the punishment of long, hard hours in the field. Their rugged, Case-built diesel engines are built the way tractor engines should be—with plenty of strength and staying power. Blocks are heavily ribbed to keep precision parts in positive alignment. Crankshafts have extra main bearings to give full sup-

port on *both* sides of each connecting rod. And famous CASE long-stroke engine design has proved itself unbeatable in making every drop of fuel deliver the *utmost* in usable power!

It all adds up to lower fuel costs and longer tractor life...solid savings that help you trim your tractor operating costs to the bone.

Talk to your CASE Dealer about putting a new CASE Diesel on *your* farm for a free trial period. You'll see for yourself how CASE power and CASE economy can open the way to greater profits for *you*—this year and for *many* years to come!



### FREE!

\$30,000.00 BONANZA OF CASE FARM EQUIPMENT with 2 FIRST PRIZES WORTH \$15,000.00...one for Western Canada, and one for Eastern Canada.

Don't miss your Case Dealer's 1961 Canadian "SHOWCASE". Door prizes, refreshments, movies...and a chance to win a fabulous \$15,000.00 Prize Bonanza of Case Farm Equipment, plus a PHILCO HI-FI CONSOLE. Ask your CASE Dealer for date of his 1961 Canadian Showcase.

SEE "LOCK-UP" top-rated TV Drama sponsored by your local CASE Dealer.  
Check your newspaper for station and time.

### CASE SETS THE PACE IN POWER FARMING!

J. I. CASE CO., TORONTO

Edmonton • Calgary • Saskatoon • Regina • Yarkton  
Winnipeg • London • Montreal • Moncton

## LIVESTOCK



Albert Vanrobaeys

## Organized Crossbreeding

"I'M sold on crossbred cattle for the beef market, provided that good stock is used in the crossing. One of the most important points is that the cow should be a good milker, so her calf can gain fast."

This is the opinion of Albert Vanrobaeys, whose pastures at Medora, Man., were well stocked with a variety of good-looking calves last fall. But he is not an advocate of indiscriminate breeding. Albert has more than 100 Hereford cows and heifers, and is continuing with some straight Hereford breeding. In addition, he has 3 full-blood Charolais bulls, which he bought from Texas with 12 Charolais (15/16) heifers and 18 Charbray (7/8) heifers. He's breeding some of the Charbrays back to the Charolais bulls to get 15/16 calves. But also he is breeding Here-

ford females and four Holstein cows to Charolais bulls.

When Albert rounded up his calves for castration in the fall, it was quite plain to see that the straight Hereford calves, which were born first, were generally smaller than the crossbreds. Best of all was his first Charolais-Holstein calf, which was big and deep in the body, seeming to bear out what is said about good milkers producing fast gains. However, Vanrobaeys pointed out that the Hereford heifers had their first calves in 1960, and he would expect their next crop to make better gains.

There's a good demand for Charolais these days, but Albert considers the best moneymakers for him are the crossbreds he feeds out. Quite apart from their big gains, the meat appears to be of top quality.

The Charolais and Charbray females were imported in June 1959 and took a while to settle down in their new environment. The Charolais were better adapted to Manitoba conditions than those with the Brahman blood, but all of them appeared



Charolais and Charbray heifers were brought to Medora, Man., from Texas.

to overcome the initial setback. Not one heifer or calf has been lost in calving. He called the vet. to help with one of the Charolais, but only because the calf was coming out awkwardly. The delivery was satisfactory.

Albert has a yard for his big herd in winter, with high board fences on



A growthy Charolais x Holstein calf.

the east and west sides. Loose housing runs along the north end, and there is a barn on the south side, used mainly for housing the bulls. A horizontal silo is on the eastern side, and the clover silage is moved by front-end loader and dumped into mangers. On the other side of the yard there's a big supply of chopped straw because the cattle take a liking to it when they're having silage.

Albert Vanrobaeys farms four quarter-sections. He went into the Charolais business as a hobby, but it has

IMPROVE  
YOUR  
LAND

INCREASE  
YOUR  
EFFICIENCY

## VALUABLE INFORMATION FOR YOU!

These authoritative booklets—and other informative literature—are offered to you by Caterpillar for better understanding of the most modern methods of land improvement. They are yours at no cost—simply fill out the coupon below.

### Techniques of LAND IMPROVEMENT

Terracing ... clearing ... forming ... tilling ... fertilizing ... all these land improvement techniques are completely described in 16 pages of valuable information. Here is a planned sequence to improve your land and the equipment best suited for it.

### Farm Easier ... Farm Better

This attractive 8-page booklet describes five points of superiority with Caterpillar track-type Tractors and the Caterpillar system of Tool Bar farming. They are: *Engineering ... Convenience ... Comfort ... Versatility ... Dependability.*



Write for this  
**FREE INFORMATION**  
**CATERPILLAR**

Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co.

Caterpillar of Canada Ltd., Toronto • Caterpillar Tractor Co., General Offices, Peoria, Illinois • Caterpillar Americas Co., Peoria, Illinois • Caterpillar Overseas S. A., Geneva • Caterpillar of Australia Pty. Ltd., Melbourne • Caterpillar Brasil S. A., São Paulo • Caterpillar Tractor Co. Ltd., Glasgow

To: Caterpillar Americas Co.  
Peoria, Illinois

Gentlemen:

Please send me information on the following subjects which I have marked:

- |   |   |
|---|---|
| <input type="checkbox"/> Techniques of LAND IMPROVEMENT | <input type="checkbox"/> Crawler Tractors—below 100 HP      |
| <input type="checkbox"/> Farm Easier ... Farm Better    | <input type="checkbox"/> Implements for Cat Diesel Tractors |
| <input type="checkbox"/> Crawler Tractors—above 100 HP  | <input type="checkbox"/> How to use Caterpillar Tool Bars   |

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Province \_\_\_\_\_

I am a ☐ Farmer ☐ Stockman ☐ Student ☐ Other \_\_\_\_\_

## LIVESTOCK

aroused so much interest among prospective buyers that he is having to devote a fair amount of time to it now.

"I want to make it clear that I'm not trying to knock the established breeds," says Albert. "As you can see, I have a lot of Herefords here. My point is that properly organized crossbreeding can do a lot for those who feed beef calves."—R.C. V

## Bulk Helps Carcass Quality

THE call goes out continuously for top quality pork, and it makes sense. But in feeding hogs for top quality, remember these three basic factors:

1. No pig can produce meat up to the level limited by its inherited tendencies (genotype) unless it is fed a sufficient quantity of protein.
2. No pig can be forced to produce more meat than its genotype permits simply by giving extra high levels of protein in the feed.
3. When daily requirements for maintenance and meat production are covered, the rest of the daily feed intake will go into fat production.

A couple of years ago, the University of Saskatchewan tried feeding 120 Yorkshires a basal ration of equal amounts of wheat and barley, plus a mixture of soybean oil meal, meat meal, minerals and vitamins to provide 14 per cent protein, and the necessary levels of minor ingredients. This basal ration was diluted by 3 different levels of 5 different types of bulk—making a total of 15 mixtures with 57 to 78 per cent digestible energy. The bulks were oat hulls, alfalfa, wheat bran, cellulose, and corn cobs, all ground in a hammer mill and mixed with the basal ration.

The results showed that higher levels of bulk produced slower gains in live weight and lower dressing percentages. At the same time, these disadvantages were offset by more efficient use of grain and concentrate, lower percentage of middles, less back fat, higher Advanced Registry scores, and therefore higher quality pork.

Since pigs now use self-feeders, J. E. Troelsen of the Swift Current Experimental Farm, Sask., recommends that the simplest way to restrict feed consumption for maximum carcass quality is to dilute the ration with a bulk. This can be ground hay, straw, severely frozen grain, or other fibrous material. The restriction should be imposed when the body weight is about 100 lb. and through to finishing. Before that, top rate of growth is essential. V

## U.S.S.R. Uses A.I. for Sheep

THE Soviet Union has a well-established program for artificial insemination of sheep, according to the Meat Packers Council of Canada. In recent years, more than 50 per cent of all ewes have been bred

artificially in Russia. There has been some difficulty in certain areas due to lack of facilities for sterilizing equipment, refrigeration, and transportation for semen. But quality improvement has been an important advantage of the program.

With artificial breeding, 1 ram is required for 1,000 to 1,500 ewes, in contrast to 1 ram for 30 to 50 ewes in natural mating. However, A.I. has been found practicable only where there is plentiful and cheap labor, on account of the need for intensive veterinary service and close supervision of flocks.

In one district, 87,000 ewes were bred to fine wool rams. The offspring produced over 2 lb. more wool than their mothers. V

## More About Leptospirosis

THERE'S more leptospirosis among cattle and swine in North America than was originally suspected. The increase may be real, but Dr. P. J. G. Plummer, director of the Canada Department of Agriculture's animal pathology laboratories, thinks it could be due to greater use of diagnostic facilities.

Effective control is difficult. Leptospirae are much more dangerous when shed into a favorable environment. They survive for many days in wet, alkaline surroundings, but die rapidly on dry ground or pasture, particularly when the soil is acid. Cattle should not be exposed to surface water which has been contaminated with urine.

Vaccines are available, but their effective, practicable application is difficult. V

## Best Defense Against Virus Pneumonia

THERE'S still no effective drug to combat virus pneumonia in hogs. Healthy housing is the average hog producer's best defense against it, says Dr. J. G. O'Donaghue, Alberta's extension veterinarian.

Swine pick up the pneumonia virus early in life on infected premises. A typical symptom is persistent coughing, without any indication of serious disease. Round worms, dust, etc., also cause coughing, but virus pneumonia is responsible more often. If it is not checked, the disease can cause serious illness, especially if secondary complications like bacterial pneumonia set in. Unfortunately, impaired growth rate and the occasional casualty can go almost unnoticed until more serious trouble develops.

Respiratory infections are more prevalent in the winter months. Inadequate ventilation, drafts, and dampness weaken the animals' resistance to these infections, and severe losses from virus pneumonia are more likely to occur.

If you are worried about poor housing and inadequate facilities for hogs, ask your district ag. rep., or a veterinarian for advice. V

## Papillomas May Go Away

CATTLE warts (papillomas) usually clear up without treatment, but if the non-cancerous tumors persist over a long period, surgical removal or a vaccine treatment is advised by Dr. F. E. Graesser, Alberta veterinary micropathologist.

These warts can range from a

single nodule to numerous cauliflower-like growths. They occur usually around the eyes, ears, neck and shoulder. But dairy cattle's teats and udders are frequently affected. Infection spreads from animal to animal, or by direct contact with contaminated objects. Calves and yearlings seem to be the most susceptible, and stabled cattle are more often affected than those on pasture. V

# FARMERS ON THE GO

do all lubrication jobs quicker, cleaner, more efficiently with

## TEXACO MULTIFAK 2

now in cartridges!

Save precious time . . . do the job better, without mess or waste, with new TEXACO MULTIFAK 2 in cartridges! Grease stays clean, refinery fresh, because the cartridge stays sealed until it is in your grease gun . . . where it can't be contaminated. For farm equipment, for the "do-it-yourself" man, TEXACO MULTIFAK 2 in cartridges can be used for all types of grease applications.

**ASK YOUR TEXACO FARM SUPPLIER  
HOW TO GET YOUR FREE GREASE GUN**

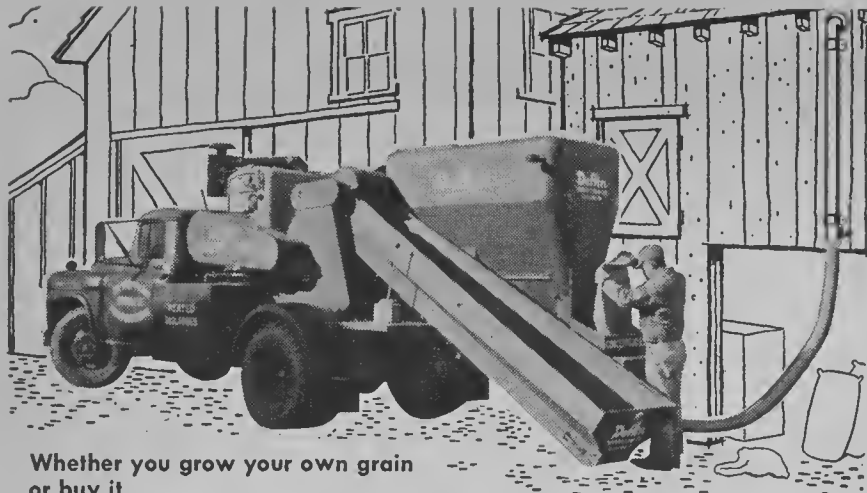
(limited time only)

It pays to farm with

# TEXACO







Whether you grow your own grain or buy it ...

### DAFFIN FARM-MADE RATIONS SAVE YOU MONEY!



Send for FREE BOOKLET M-70 that tells how to get better feed at less cost!

Daffin Processing keeps feed crops on the farm where they belong, ending costly handling, hauling, and off-farm storage. If you're short of grains and roughages, your Daffin Feed-mobile operator can furnish what you need. He'll grind, mix, and molasses-blend everything with commercial concentrates on the spot ... and bulk unload it right where you want it. You'll be ahead in time, labor, and money!

Daffin Corp. of Canada, Ltd. Dept. CG-2, 1270 Sargent Ave. Winnipeg, Manitoba

# Daffin

MODERN FEED MILLING EQUIPMENT

CONVENIENCE ... ECONOMY ... PROFIT

## 1 PUMP FOR ALL DEPTHS UP TO 40'

# Beatty JET PUMP

### KEEPS ON DELIVERING

Unlike ordinary shallow well pumps, this jet pump guarantees a continuous supply of water even when the well level drops, without the purchase of extra parts.

### ECONOMICAL TO OPERATE

At moderate pressures, this Beatty jet pump will produce a high volume of water at the lowest possible cost.

### SAVES COSTLY REPAIRS

If leakage should occur, a self-adjusting, leather sealing ring automatically expands to prevent damage. It costs only 40 cents to replace a leather sealing ring. With other pumps that don't have this feature it could cost you 40 dollars for new parts.

### EASY TO INSTALL

This pump, as shown, comes complete, ready to install.

### QUIET OPERATION

The silican bronze impeller is vibrationless.

We also have the famous Beatty Direct Drive Shallow Well and Deep Well piston pumps, and a complete range of submergibles.

This is the pump that you can use for both 22 foot shallow wells and 40 foot deep wells without any extra parts.

Even at depths over 40 feet, all that is required is a control valve and injector exchange.



SEND COUPON FOR PRICES AND LITERATURE You'll be amazed at the low price of this leading jet pump.

Beatty Bros. Limited BOX F 357 Fergus, Ont. Please send me your literature and prices on the new Jet Pump.

NAME.....  
P.O.....R. R. No.....PROVINCE.....  
Town nearest you.....  
Lot.....Concession or Range.....  
What kind of a water supply system have you now?.....

## LIVESTOCK

## Six Features For Feedlot Design

THE kind of feedlot you build will likely depend, in part, on what building materials are available, the slope of the land, and the convenience of feed supplies. These influences are variable, and there are others, but Dr. C. M. Williams of the University of Saskatchewan has drawn up a list of certain aspects of feedlot design to serve as a guide for the new cattle feeder.

**Drainage.** A substantial slope is desirable where possible. Flat land can be bulldozed into a hill, which will be a dry knoll in wet periods, or it's possible to bulldoze out a gully

to drain off heavy rains or melting snow. Cement or timber aprons in front of feeders and water troughs are well worth providing. They are easy to make.

**Feeding.** Preparation and distribution of feed takes the largest portion of labor in a feeder cattle operation. Some system of dropping or augering feed grains into grinders and trucks is desirable. Mechanical distribution into troughs by augers or belts is most practical in medium operations of 100 to 500 head. Smaller operators should watch overhead and investment per head, and will often choose self-feeding because it may need less daily atten-

tion and will thus conflict less with other farm operations. Larger operators usually choose hand feeding, because it gives slightly higher efficiency in use of feed and better control of feed composition and quantity.

Trough space increases from 6 in. per head to 2 ft. per head, depending on age of animal, the presence or absence of horns, and whether you are using the hand-fed or self-fed method.

**Watering.** In winter, 6 gallons of water, and in summer, 20 gallons per steer per day, must be available. Water is more easily provided and

warmed in one large rather than several small tanks. Location of pens to allow watering at one point is worth considering.

**Shelter and Bedding.** The chief shelter needed is a windbreak, using trees and hills where available, but usually a board fence is necessary. There is some doubt whether over-

head shelter is any advantage where snowfall is low. Adequate bedding in a restricted area is essential to provide a manure pack for the animals' comfort and warmth.

**Pens and Space.** Very small feedlots should provide a total area per steer approaching 90 sq. ft. Larger operations may reduce this to 60 or 70 sq. ft. per animal. If overhead shelter is provided, the space is normally about 30 sq. ft. per steer. Crowding under shelters may defeat their purpose by causing overheating and high humidity, with subsequent chilling when steers move outside.

Even the smallest farm feeder will find it useful to have more than one pen. Some sorting is usually needed for different feeding rates. As the operation increases in size, each pen increases in capacity to a maximum of 200 or 300 head, and the number of pens increases to 3 or 4 to handle cattle in groups which will represent the various stages of finishing.

**Equipment.** A loading chute, a squeeze and a small holding pen are essential. It's useful to have a

small pen and shed for sick animals. A scale suitable for weighing feed and cattle will soon pay for itself. ✓

## Swine Test for Artificial Breeding

ARTIFICIAL insemination will be an accepted method of breeding sows on Wisconsin farms in the near future, according to R. H. Grummer of the University of Wisconsin. Results of a field test made by the university and an association of breeding co-operatives have indicated that 50 per cent of the sows and 35 per cent of the gilts conceived to the first service. About 60 per cent of dairy cattle conceive to first service.

The cost of A.I., according to Grummer, would be offset largely by better quality feeder pigs. A.I. also allows more sows to be bred to a single boar. Under natural service, a boar will breed about 15 sows per season, whereas 1 collection of semen can inseminate 8 to 15 sows. This would allow 24 to 45 sows to

be bred per week with the semen from 1 boar.

Control of diseases spread by boars is another advantage cited in favor of A.I. Boars in stud can be watched closely, and inseminators are usually careful to disinfect footwear and equipment.

The biggest disadvantage of A.I. is lack of ability to recognize heat in gilts. ✓

## Prepare for Lambing

WHEN the lambing season comes round again, remember that the bred ewes need special care. Start them on a ration of good hay, supplemented with 1 to 1½ lb. of whole oats 6 weeks before lambing, says Martyn Palmer of the Manitoba Department of Agriculture. A mineral mix of half calcium diphosphate and half loose cobalt iodized salt should always be available. This ration will help them to higher milk production. ✓



The Hammond Spinet Organ in Provincial.

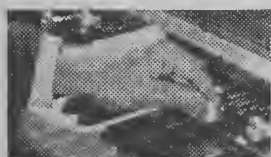
## This is the Hammond Spinet Organ

The beautiful organ with the lovely voice that has won more hearts than any other ever made. You can rent it for just \$25 a month. You can own it for just \$25 down.

This is the organ that can't go out of tune. Only the Hammond offers you Permanent Pitch.

The organ that has thousands of tones—more than enough to keep you pleasantly occupied for a lifetime.

The organ whose tones are generated electrically. That's why it can't go out of tune, why it has so many tones.



The organ with the simple Harmonic Drawbar method of selecting and blending tones. The Drawbars let you control Hammond's thousands of tones easily.

The organ that gives you percussion tones in a new way—Touch-Response. It lets you bring in percussion simply by changing touch on the keys.

The organ that lets you do much more with vibrato. You can play Hammond vibrato from each keyboard separately, or from both at once.

The organ that's attractively at home in your living room. Your choice of finishes: walnut (and at additional cost), blond, provincial, ebony, oak and modern walnut.

The organ that takes up very little space. The Spinet is less than 4 ft. wide, just over 2 ft. deep, and 3½ ft. high.

The organ that weather can't hurt. Humidity, extreme heat and extreme cold won't affect its tone.

The organ with the unique PlayTime Plan of lessons and home rental. (Ask your Hammond dealer for details.)

The organ that's priced within the means of every family. \$1675, including duty and sales tax; freight extra. Low monthly payments. See your Hammond dealer soon.

## HAMMOND ORGAN

... music's most glorious voice

Hammond Organs  
P.O. Box 65, Terminal A  
Toronto, Ontario

Please send me:

- ☐ Free "Your Keyboard to Happiness" color catalog.  
☐ Details on how to get a free Hammond LP record.

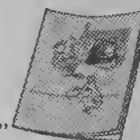
Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Prov. \_\_\_\_\_

HAMMOND ORGAN WESTERN EXPORT CORP.

CG2-61





## LIVESTOCK

## This Breed Goes Both Ways

ARTHUR HOWARD is a booster for Red Polls, as president of the Manitoba Red Poll Association and a successful breeder of these dual-purpose cattle at Crystal City, Man. He started in 1951 with a bull from Alberta and two females. The herd is now 37 and he's milking up to 15 of them.

This is a good farmer's cow, says Arthur. It hasn't become a rich man's hobby, so prices have stayed down to earth. The dual-purpose qualities are an especial advantage to the farmer who is not a specialist. He can't afford to keep a cow all year just to raise a calf, so the dairying provides ready cash and the beef gives him a useful bonus over a longer period.

Red Polls are fast maturing and have a lot of size. These things are important when pounds are what the farmer is paid for, he says. One of Arthur's calves came in September with a birth weight of 115 lb. He called a vet. to help with the delivery, but the cow was big and could take it. His cows also produced two sets of twins last year.

Some steers bought by Arthur in 1959 for feeding arrived in pretty thin condition. But they were good purebred Red Polls, and in June of last year he was able to ship them

at 900 to 1,000 lb. at close to 18 months. They dressed out between 58 and 59 per cent.

Arthur Howard rates the absence of horns as another real advantage. For instance, Red Polls can crowd around a water trough without injuring one another. They are also very quiet, and even his children can lead them without danger. This docility applies in the pasture too. When fences have had a wire down, the Red Polls have made no attempt to get out.

Docility is a particular asset when the bulls are so big. His first bull made 2,660 lb. when it went to market, and his present herd sire is about 2,200 lb., and could go higher.

The Howard herd has not been on ROP tests long enough for conclusive results. But Arthur is confident that some of his cows are making 8,000 to 9,000 lb. of milk, with 4 per cent butterfat. One 3-year-old is giving about 38 lb. of milk daily, and some others would be doing better than that.

The Red Poll Association considers an 8,000 to 9,000 lb. average is adequate provided that the herd is making good beef too. Milk yields naturally go higher in herds where the emphasis is on dairying, but others prefer to go for more beef. It will depend often on which is the more profitable at a particular time. Red Poll breeders contend that they



Arthur Howard, president of the Manitoba Red Poll Association, with one of his heifers which was the grand champion at a regional Red Poll show.

do not compete with the dairy breeds in milk production, nor with the straight beef breeds in the show ring, but they consider that Red Polls rate high in net returns.

The Canadian record for a Red Poll cow is 18,134 lb. of milk, with 748 lb. of butterfat testing 4.12 per cent in 365 days. This was set up by Oatland's Coral owned by A. D. Pocock of Moose Jaw.

Arthur Howard claims the demand for Red Polls is increasing. There are now 54 breeders in Manitoba alone. Females are in strong demand at reasonable prices. The market for bulls has been hit by artificial insemination, but they hope to have bulls accepted for A.I. after a progeny testing program has been completed.

--R.C.

### DDT in Feed

DON'T feed the stalks, leaves, cobs or husks of corn to livestock if the corn has been treated with DDT for corn borers. Harold Goble, Ontario's provincial entomologist, says DDT is cumulative and can build up in livestock milk and meat. The same applies to corn treated with DDT if cobs and husks are being sold by processors to farmers.

*Designed specifically  
for Western Canada*

**THIS NEW IDEA LOADER HAS MUSCLES  
TO MATCH THE HORSEPOWER OF  
TODAY'S BIGGEST TRACTORS**



■ Broad-shouldered and heavy-muscled, this NEW IDEA loader is tailored to give users of big, 4-wheel standard tractors a time-saving, work-saving, pays-for-itself piece of equipment that's geared for the large farms of Western Canada.

Special mounting brackets are made to fit it to most tractors—even big 4-5 plow tractors. And one man can mount it easily in just fifteen minutes. Short coupled design and low profile make it easily maneuvered in close quarters—and the main frame and cylinders are easily removed as one unit to protect cylinders from damage and cut mounting time.

DISTRIBUTED IN WESTERN CANADA BY:

ALBERTA & B. C.—Northwest Farm Equip., Ltd.  
Cor. 7th Ave. and 6th St., E., Calgary, Alberta

SASKATCHEWAN—Grain Belt Farm Equip., Ltd.  
1920 First Avenue, Regina, Sask.

MANITOBA—Allied Farm Equip., Ltd.  
980 Pacific Avenue, Winnipeg, Man.

### SPREADS ACCURATELY OR YOUR MONEY BACK

NEW IDEA fertilizer spreaders will spread any fertilizer in any condition in any amount (10 to 5,000 pounds per acre) uniformly and accurately—or your money back! Ask your NEW IDEA dealer today!



Mail coupon to nearest distributor listed below  
Please send information on the NEW IDEA hydraulic loader with reinforced frame for heavy tractors.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ STUDENT ☐

TOWN \_\_\_\_\_ PROVINCE \_\_\_\_\_

☐ Also, more information on NEW IDEA fertilizer spreaders.







## How Long Antibiotics Stay

**A**NTIBIOTICS are a boon to dairymen, but they're not an unmixed blessing. Even small amounts of antibiotics consumed in food, such as milk, can provoke allergies in some people. Antibiotics may interfere also with cheese making by preventing proper action of helpful bacteria, yeasts and molds.

H. G. Blobel and C. W. Burch of the University of Wisconsin have been looking into the question of how long antibiotics show up in milk after a cow has been treated. Here's what they found:

- Procaine penicillin G crystalline, one of the most common penicillin preparations, appeared in milk a shorter time when it was carried in a water suspension than when it was carried in oil. None was detected in milk 60 hours after an intramuscular injection of 3,000 to 6,000 units for each pound of body weight. But the same dose of penicillin suspended in sesame oil persisted up to 32 hours. Low-producing cows retained the penicillin longer than the high producers.

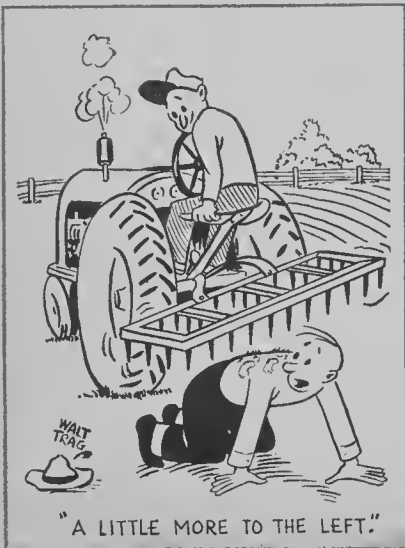
When each quarter of the udder was infused with 100,000 to 300,000 units of penicillin G crystalline in a water and oil emulsion, the residues were detected up to 132 hours later. Penicillin often traveled from treated to untreated quarters, largely through the bloodstream.

- Oxytetracycline residues showed up in milk only for 24 hours when 2 to 4 milligrams per pound of body weight were given intravenously. The drug persisted for as long as 72 hours when larger doses were infused into the udder.

- Dihydrostreptomycin was gone from the milk within 48 hours, even when up to 1 gram per 50 lb. of cow's body weight was given intramuscularly.

- Crystalline chlortetracycline, given intravenously at 4 milligrams per pound of body weight, persisted up to 48 hours after treatment.

These drugs are used by veterinarians and farmers. ✓



## D.H.I.R. Made Big Price Difference

**T**HE Alberta Department of Agriculture quoted recently an example of what Dairy Herd Improvement Records can do for a farmer. When Walter Schultz of Bashaw sold his herd of 57 Holstein cows, the 33 head on test under the provincial cow testing service averaged \$350 each. The remainder of the herd averaged less than \$250 each.

Breaking these figures down still further, the cows producing more than 10,000 lb. of milk and over 350 lb. of butterfat brought the top prices. Many of them went as high as \$400. The price went down with lower milk and butterfat. It was interesting to note also that buyers paid some attention to type, but were not so interested in the date of freshening.

Considering that Schultz's cows were all grade animals bred to a medium quality Holstein bull, these prices were outstanding. They were not fitted for sale either. According to J. L. Kerns, district ag. at Ponoka, the high prices can be credited to Dairy Herd Improvement Records. Catalogs printed for the sale showed the number of days each animal had been milking, and the number of pounds of milk and butterfat. ✓

## Plan for Next Pasture Season

**W**E haven't enough research to back us on the "best" way to start dairy cattle on pasture, but most farmers agree that the change from barn to pasture feeding should be gradual to prevent weight loss and any possible milk drop, according to Dr. Bruce Stone of the Ontario Agricultural College.

Early pasture is high in nutrients and very palatable, but it's 80 to 88 per cent water. This means a 1,200-lb. cow starting on pasture must increase her feed intake from 36 lb. of hay, or its equivalent, to 180 lb. of green forage. This would be peak intake for most cows, since they rarely eat over 15 per cent of their body weight.

At the same time, rumen bacteria take 2 to 4 weeks to adjust to major ration changes. The cows suffer strain, which adds to weight loss and increases the chances of a milk drop.

Dr. Stone points out that all this adds up to a nutrient lack. So make the change gradually to pasture feeding; feed hay free choice for 2 or 3 weeks, with a hay rack in the barnyard or field. If cows refuse to eat dry feed, try cutting down their grazing time. ✓

## Feed for Calving

**K**EEP up and even boost the feeding of cows that are about to calve. Ontario Department of Agriculture dairy specialists say there's little truth in the belief that cutting the ration just before and right after calving will reduce the udder swelling. In fact, too little feed at that time can lead to acetone (ketosis). ✓

heads it's **NEW AGROSOL** tails it's **AGROX**

**either one**

**CONTROLS SEED-BORNE DISEASES EFFECTIVELY**

Returns many times each \$1 you invest.

Don't let seed-borne diseases rob you of your hard-earned profits! Protect your seed grain with new liquid Agrosol or its companion product — Agrox . . . 9 years proven across Western Canada! Either one goes to work fast to disinfect wheat, oats, barley and flax.

Either one gives you long lasting protection in the soil.

Specially developed for Western conditions, Agrosol is a new liquid seed dressing with the high

protective qualities of Agrox.

Agrosol is easy to use . . . a Chipman "treat-o-meter" is supplied free with each bottle. You can apply Agrosol as your seed passes through a grain auger.

**BETTER GRADES, MORE PROFITS** — Seed treated with either liquid Agrosol or Agrox will give you healthier crops . . . greater yields.

### SEED TREATMENT PAYS

Studies carried out by agricultural scientists show each \$1 spent on seed dressings can return up to \$14.

**CHIPMAN**  
*Agricultural Chemicals*  
MONTREAL HAMILTON WINNIPEG SASKATOON EDMONTON

*When Writing to Advertisers Please Mention The Guide*

**Vaccinate and Be Safe!**

**FRANKLIN**

**CCS BACTERIN**  
Clostridium Chauvei-Septicus Bacterin

*Gives You Complete*

**BLACKLEG Protection!**

More stockmen vaccinate more calves with this pioneer Franklin brand than any other make.

Sold by Franklin Drug Store Dealers in all Trading Centers  
Write Today for Free Illustrated Catalogue

**FRANKLIN SERUM CO. of CANADA, Ltd.**  
526—7th Ave. S.E. CALGARY, ALBERTA

**DEPENDABLE IMMUNITY**

**EXPORT**

PLAIN OR FILTER TIP CIGARETTES

## FAST COUGH RELIEF!

From the first spoonful, you will feel the relief. Pinex goes to work instantly, soothing those sore membranes, easing the harshness of your cough. Try it. Ask your druggist for Pinex, known for fifty years. In ready-mixed form (ideal for keeping near you at work) or concentrated for family economy.

### PINEX

- \* eases soreness
- \* reduces tickle
- \* controls coughs



# PINEX

CONCENTRATED  
or READY-MIX

## FREE BOOK GIVES MANY TIPS FOR HOUSE & FARM

You'd never dream there could be so many ways common, everyday household lye can help you. It can save you time. It can save you work. It can save you money. In more ways than you can imagine. It's all outlined in a free booklet prepared by an eminent Canadian Bacteriologist entitled, "How Lye Can Help You On The Farm And In The Home." It contains over 60 pages filled with valuable information that no home or farm should be without. To get your free copy, simply write to: Standard Brands Limited, 550 Sherbrooke St. W., Montreal.

### Volume Gun Irrigation



### REPLACE YOUR SPRINKLERS!

See story on page 28 of the December Country Guide.

Inquiries invited from  
farmers and dealers

**H & T DISTRIBUTORS LTD.**  
1107 - 2 Ave. A North, Lethbridge, Alta.  
Canadian Distributors: Volume Gun; Big  
Squirt Irrigators; Meade Tractor Cabs

## DAIRYING

### Calving and Milk Production

**T**O find the effect of age and body weight of cows at calving on their milk production, Dr. R. D. Clark of the Lethbridge Research Station, Alta., collected 1,344 records from 6 different herds, covering lactations 1 to 8.

Dr. Clark found, for the most part, that the tests showed the importance of good herd management. Cows must maintain their body weight, be fed to reach maximum growth, and be given the proper dry period of 6 to 8 weeks to get into condition for the next calving. An important indication from the results was that body weight might be given more consideration when milk production records are being compared. With weight having a greater effect on milk production than age did, adjustment for weight when making sire comparisons might well be an advantage.

In brief, Dr. Clark's study showed that heavier cows gave more milk. But for the first lactation it did not pay to delay breeding to obtain extra growth and weight. The extra milk did not pay for cost of production. Also, in the first lactation the influence of age and weight was about the same. In the second lactation, age had a greater influence on fat production than weight did. In lactations 3 to 8, weight was the important factor and the influence of age was small. ✓

### Better Cows Make Up Difference

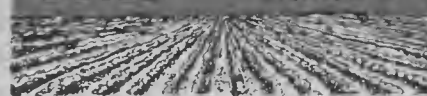
**M**ANITOBA farmers were milking only 211,000 in June of 1960 compared with 236,800 in mid-1951, but this doesn't mean that milk production has dropped. Peter Herner, provincial dairy specialist says that rising production costs have caused a large number of small fluid milk producers to quit; while larger producers have been able to meet the cost factor through mechanization, improved management and better breeding. The result is higher production per cow and higher total fluid milk production.

Artificial insemination has resulted in better breeding, which combined with improved feeding and management has raised average annual output per dairy cow in Dairy Herd Improvement Associations from 7,880 to 9,935 lb. ✓

### The Most for Cream

**H**OW can you get the most money for cream that tests over 30 per cent butterfat? H. R. McRae of the Manitoba Department of Agriculture suggests that you milk in well-tinned or stainless steel dairy pails; that you use cold water (below 50°F) to cool quickly in summer and prevent freezing in winter; that you keep cream clean, sweet and free from objectionable flavors; that you keep cream in stainless steel or well-tinned, seamless containers; and that you ship your cream at least twice a week. ✓

## SOILS and CROPS



## Farmer-Financed Campaign Promotes New Seed Grade

**T**HIS winter farmers will see and hear a series of advertisements in farm papers, and over radio stations, sponsored by the Canadian Seed Growers' Association. This is, in effect, another farmer-developed, self-help program. To get an explanation of it, The Country Guide interviewed Mr. Les Shannon, Secretary-Treasurer of the C.S.G.A.—D.R.B.

**Q. Mr. Shannon, what is the purpose of this advertising campaign?**

A. Seed regulations have been changed in Canada, and seed growers are setting out to explain these changes to farmers. The changes will assure farmers of an adequate supply of seed, which will be of a higher quality than ever, at reasonable prices. Farmers will have less trouble selecting the right kind of seed for their purposes now, too, for *Certified* seed is the kind that is tailor-made for farmers.

**Q. What are the main changes in the seed regulations?**

A. Cereal grains have been affected most. Production regulations for them have been brought into line with those introduced for crops like forage seeds, tobacco and vegetable seeds. Registered seed, which was often used in the past by farmers for commercial production, is now intended specifically for seed growers. *Certified* seed is for farmers.

**Q. Will this *Certified* seed be as good as the Registered seed farmers used to buy?**

A. Better, because the changes in regulations mean that *Certified* seed will be no further away from the parent seed stock than four generations. Even Registered seed used to be further removed from its parent stock—especially registered stock sold for commercial production.

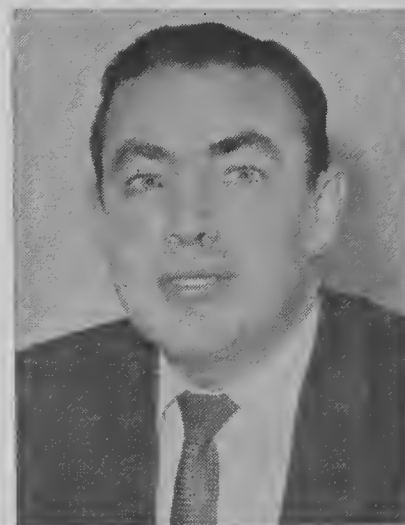
**Q. Why have the seed regulations been tightened up in this manner?**

A. Seed growers, like other farmers, are going modern. They are growing larger acreages, harvesting it with combines, handling it in bulk. There is greater danger of impurities getting into seed handled this way. So, to assure customers of higher quality seed, most cereal varieties will now be Registered for only about three generations.

**Q. Why will seed be more readily available to farmers now?**

A. There are four times as many foundation seed growers today as there were 10 years ago. They are located in areas right across the country too. Foundation seed stock of newly developed varieties—and don't forget, more new varieties are coming available than ever before—can be turned over to these people today for rapid build-up of supplies, with little chance of loss, so it can soon be made available to the public.

**Q. Are most farmers using good seed in their cropping programs today?**



Les Shannon

A. Many of them—maybe almost half—still plant seed each spring that would be graded "Rejected" under the standards of the Canada Seeds Act.

**Q. Why do you say it pays to use *Certified* seed?**

A. Let's look at barley first. Premium prices are paid for barley that meets malting grade standards. The only way a farmer can be assured of getting seed of a particular variety is to buy *Certified* seed. The question of variety is important also in wheat and oats. Certain varieties have characteristics like disease resistance, hardness or straw strength which will enable them to produce higher yields, and may even prevent crop failures.

The benefits of selecting the right variety of forage crop may be even more dramatic.

**Q. Will it cost a farmer much to get the benefits of *Certified* seed?**

A. Don't forget the cost of seed is one of the smallest production costs. It's only about 5 per cent of the total cost of growing a cereal crop, and about 10 per cent for forage crops. It's foolish to jeopardize the total investment in a crop, by using common seed, when good seed costs so little extra.

**Q. How do you suggest a farmer should select the seed for his cropping program this spring?**

A. Crop specialists have zoned most provinces into crop production areas. Recommendations as to specific varieties suitable for each area are listed. Any agricultural representative or reputable seed dealer will have these lists. A farmer can

SOILS AND CROPS

select from these lists the variety of seed that will best suit his purposes. Then, he should be certain he buys *Certified* seed of the named variety.

**Q. Tell me something about the Canadian Seed Growers' Association itself.**

**A.** It has more than 6,000 members, most of whom are farmers, who have specialized in seed production. The advertising program is a self-help program. Members are producing seed that can make money for other farmers, and they are setting out to see that farmers are made aware of this.

**Q. Has the C.S.G.A. any legal status?**

**A.** Yes, the government has turned over to the C.S.G.A. the responsibility for recording pedigrees on all seed crops produced in this country. It has also recognized the C.S.G.A. by law, for under the Seeds Act, the organization has the responsibility to set standards for the pedigree classes of seed.

The association is financed by service fees, and it also gets a government grant. ✓

**Make Sure the Product Can Help You**

**D**ON'T invest money in a product known as "Multi-Mineral Soil Builder" until official tests have assured its value, warns the Alberta Advisory Fertilizer Committee.

The Committee reports that the "Soil Builder" contains only a trace of potash, and no nitrogen or phosphate. Sulphur and calcium are present in significant amounts, and there are traces of some minor elements. The sulphur might be beneficial on certain soils, such as west-central Alberta, where this element is lacking. But a sulphur deficiency is not believed to exist in brown, dark brown, or thin black soil zones of the province. The calcium is of doubtful value as a supplement to Alberta soils because it is already in good supply.

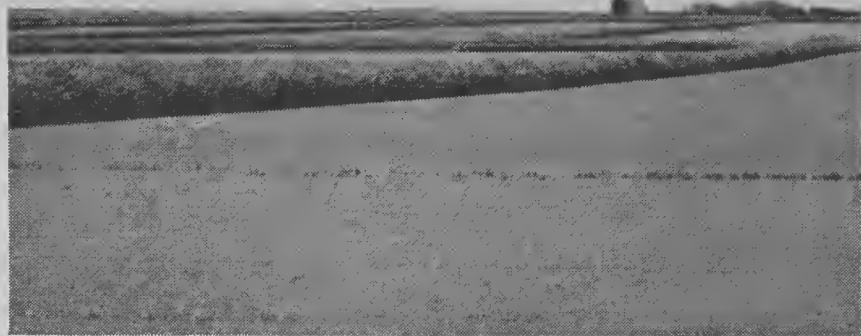
Claims that the "Multi-Mineral Soil Builder" can neutralize alkali and acid soils would not be of much value, since Alberta soils are generally neutral, or nearly so, in both acidity and alkalinity.

When buying products of unproven value for Alberta soils, caution is the best policy, the Committee advises. ✓

**Shelterbelts Pay Big Dividends**

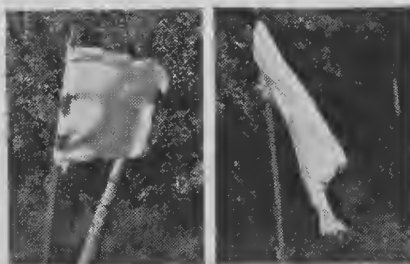
**T**HESE strips of cloth (right) beside a shelterbelt on the farm of Bill Petty at Conquest, Sask., illustrate how field hedges cut down wind velocity. The cloth on the windward side is flapping vigorously, while the cloth on the lee is almost motionless.

Conquest is the scene of one of



This is typical of the shelterbelts in the Conquest area of Saskatchewan.

the most successful tree planting demonstrations on the prairies. The project was instigated by PFRA in 1935. Working under supervision of the Forest Nursery Station, Indian Head, local farmers did the



Guide photos  
Cloth is to windward of shelterbelt on left, while other is on lee side.

actual tree planting. To ensure establishment of the tree belts, the Federal Government paid farmers \$20 per mile for a period of 5 years.

The Conquest shelterbelt area now includes about 272 square miles of farmland, protected by 695 miles of hedges. At Aneroid, in southwestern Saskatchewan, a similar project covers 44 square miles of farms and has 250 miles of hedges.

In 1950, the Saskatchewan Government began its own tree planting. Nine miles were planted that first year and 47½ miles the next. By 1959, annual planting had increased to 676 miles. A shortage of trees at forest nursery stations caused a reduction of this work in 1960, but the government expects to put in 1,000 to 1,200 miles of trees this year, and up to 2,200 miles in 1962.

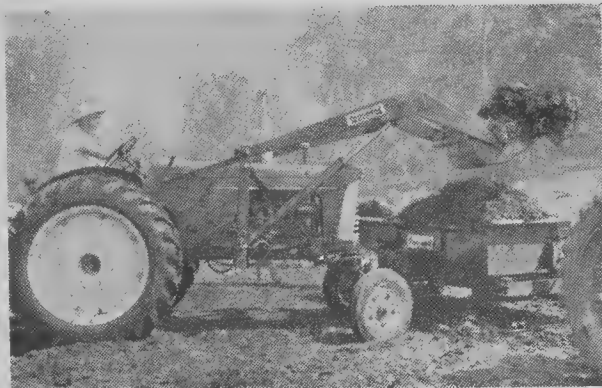
Anyone who doubts the value of this work should drive through these green areas which stand out like oases on the droughty prairie.—C.V.F. ✓

# Farmhand gives you day-in, day-out dependability during rugged wintry weather

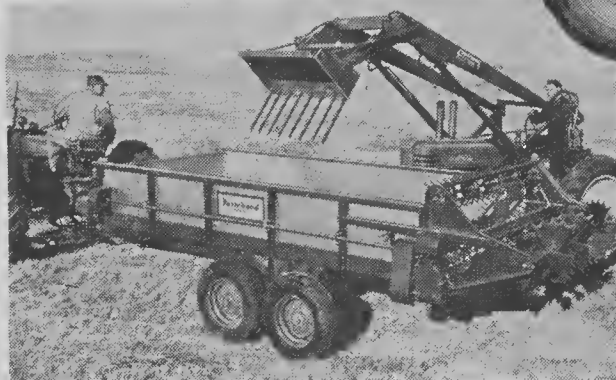
**WHATEVER THE WEATHER, FARMHAND'S "110"** Spreader hustles through daily manure spreading jobs. Flared steel sides give full 110-bu. capacity. All-steel, new design widespread cuts and shreds chunky, frozen manure. Spreads a wide, even pattern for more productive seedbeds come spring. Full length through-shaft on widespread. No stub shafts. Freeze-proof conveyor returns, smooth worm-gear drive, beater throwout for easy cleanout.



**• POPULAR 4-TON "POWER-BOX"** Spreader has 170-bu. capacity ASAE-rated. Two steel beaters and steel widespread make short work of heavy manure loads. They shred thoroughly . . . spread a wide, even swath. Other proven features include freeze-proof worm gear, flared sides and endgate for extra capacity. "Power-Box" mounts on truck, trailer, wagon or standard running gear.



**LOAD FASTER WITH A FARMHAND F-16** on your tricycle or wide front tractor. F-16 mounts ahead of steering wheel, handles full 2,000 lb. load. Reaches well out in front and up to 10 ft. high, allowing easy loading of large spreaders, wagons, trucks. Welded, box-section lift arms for heavy-duty lifting and loading of frozen materials. Hydraulically operated.



**YOUR BEST SPREADER FOR BIG LOADS.** Farmhand's 6-ton "Power-Box" handles full 230-bu. load, ASAE-rated. Makes long manure hauls profitable. Dual heavy-duty beaters, plus steel widespread shred and spread any kind of manure in uniform 9 to 12 ft. swath. Rust-proof, acid-resistant aluminum alloy sides . . . treated marine plywood floor . . . high carbon steel unloading conveyor. 2-speed clutch.

SEE YOUR FARMHAND DEALER TODAY

**Farmhand**  
FIRST IN FARM MATERIALS-HANDLING

**FREE INFORMATION!**  
Write: THE FARMHAND COMPANY  
Dept. CG-21  
1270 Sargent Ave., Winnipeg

Send free information on.....  
I am a student, send special material ☐

Name.....  
Address.....  
Town.....Prov.....  
A Division of  
Daffin Corporation of Canada, Ltd.



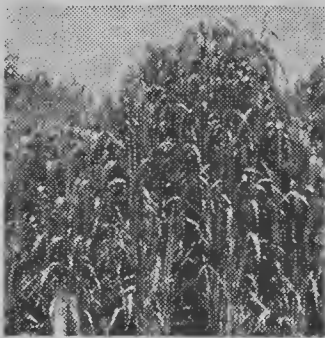
# This spring... be sure sow **CERTIFIED** seed

Today's high cost of producing cereals, pasture, hay and cash crops requires *top quality seed*. Anything less jeopardizes your whole investment. Fortunately, you can now choose Canada Certified seed and be sure.

## To protect you:



1 New crop strains offering higher yields and better performances have been developed.



2 These are field tested under various growing conditions throughout Canada.



3 Foundation crops grown by members of The Canadian Seed Growers' Association are closely checked in both field and laboratory for varietal identity, purity, germination, disease and weeds. Only crops meeting high standards qualify for certification.



## With **CERTIFIED** seed you can be sure of...

High seed quality . . . of the varieties recommended for your area . . . offering surer yields, and resulting in better grades, less dockage, more meat and milk per acre.

CERTIFIED SEED IS SOLD ONLY UNDER THIS SEAL OF QUALITY.

Look for this  
when you buy seed. ▶

Prepared by The Canadian Seed Growers' Association, Inc., in the interest of Canadian agriculture.



## SOILS AND CROPS

### Works Faster And Cuts Labor

**A**TREND to bigger power in a single unit has led some grain farmers to try tandem tractors or the crawler types. But for Hector Burton of Bethany, Man., the answer to today's need for working a large acreage with a minimum of labor is a big rubber-tired diesel known as the Wagner.

This tractor, with 4-wheel drive and 4-wheel steering, also has a flexible coupling to enable it to make short turns. Hector likes it because he can farm with one man less than he had before, and its power is ideal for the rolling land he has to work. It can pull three 10-foot cultivators, or one 28-foot deep tillage cultivator, or a 26-foot disk tiller. "Another thing that appeals to me," he says, "is the high, air-conditioned cab, which reduces troublesome noise and dirt, and gives us more comfort on the job."

The model owned by Burton is rated at 100 h.p. on the drawbar. It can work at speeds up to 6 or 7



Looking through rear window of cab, operator has clear view of his work.

can carry out the work by himself when he has to.

Aside from the Wagner, the only other tractor he needs is a small "choreboy" for jobs like picking stones. The big tractor can be operated with power-take-off, but for harvesting he prefers a self-propelled swather and combine. He likes to be able to do his combining without a tractor, while another man follows behind him with a deep-tillage cultivator.

As against the cost of the Wagner, Hector sets the reduction in maintenance and the saving in manpower, which is hard to obtain anyway; the ability to work big acreages economically, and so have the benefit of income from custom work; and the necessity for big power to haul heavy equipment on steep slopes.—R.C. V



Hector Burton in cab of Wagner pulls 28-ft. deep cultivator on custom job.

m.p.h., or travel on the highway at 20 m.p.h. Hector has 1,200 cultivated acres of his own, and works another 300 acres on contract. He reckons that his tractor can handle at least 3,000 acres in a year—something like 160 acres in a 10-hour day—so he is able to accept a considerable amount of custom work from other farmers in his district. He has one hired man to help him but

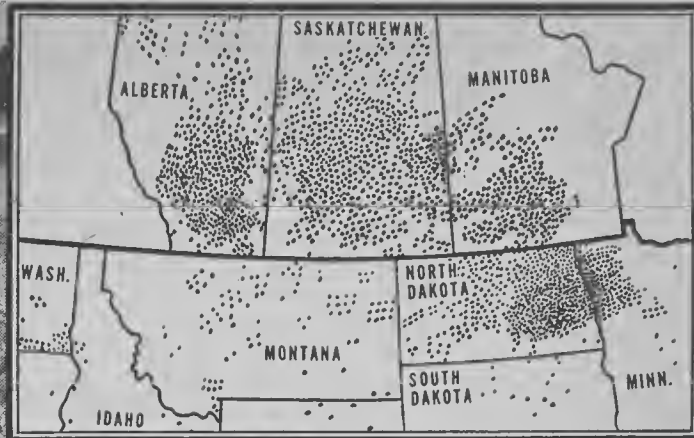
### Death on Couch Grass

**F**OR eradicating small patches of couch grass, the herbicide known as Erbon has proved better than any other tested at the Beaverlodge Experimental Farm, Alta. Dr. A. C. Carder reports that 12 oz. of the active ingredient per square rod, costing \$1.10, quickly eliminated couch grass and all other vegetation. Its effect as a soil sterilant persists for 3 to 4 years.

TCA, dalapon and amitrole are more suitable for large patches of couch grass and some other weeds in fields, but their residual effect is short. V



Rolling terrain in Bethany district of Manitoba creates problems in field work. That's one reason why Hector Burton decided to use a big power unit. [Guide photos]



▲ Dots indicate actual locations where Spencer Carbyne was tested by farmers. The results of these tests show that Carbyne provided satisfactory wild oat control on 92 out of each 100 farms treated.

◀ Notice how effectively Carbyne stopped wild oats on both sides of this untreated check strip. In extensive tests, Carbyne-treated fields averaged 9.2 extra bushels of wheat per acre, 12.5 extra bushels of barley per acre, and sugar beet production costs were lowered.

With 2356 Successful Farm Tests, Spencer Chemical Company Proves

# CARBYNE\* STOPS WILD OATS

Spencer Carbyne is the only wild oats herbicide you can apply  
**AFTER** you see the wild oats:

## What Is Carbyne?

Spencer Carbyne Wild Oat Herbicide is an amazingly selective weed killer that can take a grain (wild oats) out of a grain (such as wheat or barley). It is an emulsifiable concentrate designed to be mixed with water and sprayed directly on the wild oat plants.

## How Does Carbyne Work?

Wild oat plants sprayed with Carbyne, while they are in the 2-leaf stage, become stunted and stop growing. Most of them eventually die. The wild oat plants, which are not killed by Carbyne are stunted so severely that they produce only small seed heads at best.

## On What Crops Can Carbyne Be Used?

We recommend Spencer Carbyne Wild Oat Herbicide for unrestricted use on: SPRING WHEAT, DURUM WHEAT, BARLEY, SUGAR BEETS, PEAS and RAPE. Carbyne is accepted FOR TRIAL USE ONLY on flax. These recommendations are based on the results of three years of experiment station field testing, three years of Spencer Research field testing and the 2,356 successful farm tests in 1960.

## What Can Carbyne Do For You?

When correctly applied, Spencer Carbyne can cut your production costs and increase your yields these eight ways:

1. Permits earlier planting and thus reduces risk of late maturity.
2. Eliminates possibility of complete crop loss and seed for reseeding due to excessive wild oat infestation.
3. Permits your crop to utilize fertilizer, moisture and natural soil nutrients more efficiently by virtually eliminating competition from wild oats.
4. Makes possible easy and effective cultivation of row crops.
5. Minimizes the amount of tillage required for weed control.
6. Reduces dockage due to wild oats.
7. Regular annual treatment will promote improved future wild oat control by reducing the number of wild oat seeds returned to your soil.
8. Works with maximum economy since Carbyne is the *post-emergence* herbicide which you apply only to infested areas.

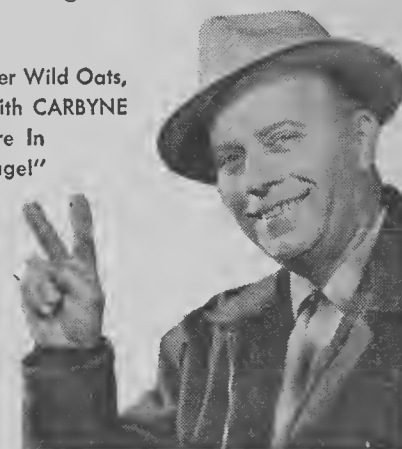
## What Does It Cost To Control Wild Oats With Carbyne?

The cost of Spencer Carbyne for controlling wild oats, for most close-seeded crops and sugar beets (banded), is only about \$4 to \$5 per acre of weed-infested crop area. Because treatment can be confined to the areas where wild oats are actually visible, you need not waste your time and chemical on fields which are not infested.

## How Can You Be Sure Of Getting The Carbyne You Need?

Because of the remarkable results obtained with Carbyne last year, the demand for Carbyne may be overwhelming this spring. Why take chances on being left out? See your dealer now and put your name on his "Preferred List for Carbyne." This way you will be sure to get your supply of this proven post-emergence herbicide.

"For Victory Over Wild Oats,  
Spray Them with CARBYNE  
When They Are In  
The 2-Leaf Stage!"



A product of

SPENCER CHEMICAL COMPANY  
Kansas City, Missouri, U. S. A.

\*Carbyne is a registered trademark of Spencer Chemical Company

The Post Emergence

# Carbyne WILD OAT HERBICIDE

is available from these leading farm chemical specialists

**CHIPMAN CHEMICALS LIMITED**  
**UNITED GRAIN GROWERS LIMITED**



# DO IT NOW

with a

## FARM IMPROVEMENT LOAN

- when there's more time to do the job
- when skilled help is available

Farm Improvement Loans, backed by the Dominion Government, are available from your bank—up to \$7,500 at five percent simple interest, and repayment periods up to 10 years depending on amount borrowed and the purpose of the loan.

These loans cover the purchase of all types of farm equipment and improvement to the farm house and farm buildings including:

- Electrification, refrigeration, heating systems, water systems, sewage systems.
- As well as the construction, renovation and additions to any building or structure on the farm including the farm house or separate homes for farm help, poultry houses, barns, stables, ice houses, granaries, milk houses, machine sheds, brooder houses, silos and garages.
- Also fencing, clearing, irrigating, and reclaiming land, soil conservation and the sinking or improvement of wells, dugouts or an ice well.

ALL HOME OWNERS are eligible for HOME IMPROVEMENT LOANS, under the National Housing Act, available through your bank—up to \$4,000 and up to 10 years to repay.

Make arrangements with your bank now, and do the job this winter when good men and materials are available.



## WHY WAIT FOR SPRING?

issued by  
authority of Hon. Michael Starr,  
Minister of Labour, Canada

0056

When Writing to Advertisers Please Mention The Guide

## SOILS AND CROPS



[Guide photo]  
Perc Waddy put lime on his alfalfa field at a rate of 3 tons per acre.

## Lime For Alfalfa

PERC WADDY almost despaired of growing alfalfa. He and other district farmers had failed every time they tried to establish a stand. But Waddy needed the volume and quality of forage that alfalfa could give him. He has one of the country's biggest dairy farms—800 acres and 175 cows at Salisbury, N.B. So in one last attempt, he had a soil test taken, and was told his land was acid and needed 3,000 lb. of lime per acre. When he quizzed soil scientists further, they added that 1½ tons was the minimum. Twice as much would be better still.

Waddy wanted alfalfa badly enough that he took the scientists at their word. He applied 6,000 lb. of lime. He also fertilized the field last spring with 500 lb. of 6-12-12 per acre, and seeded a corn, oats, peas, vetch and rape mixture for summer silage, along with his grass-clover-alfalfa mixture.

The lime did its work. Despite the driest summer in more than a decade, the seeds germinated. Once the nurse crop was harvested, the alfalfa formed a dense mat over the ground. D.R.B.

## Palliser Seed Available

PALLISER, a new 2-rowed barley best suited to southern Alberta and south-western Saskatchewan, should be readily available for seeding this year. About 800 bushels of seed were distributed in 1960 to elite and registered seed growers.

The chief advantage of Palliser over Compana, the common variety in the area, is its superior straw. Palliser is taller, more resistant to lodging and more resistant to stem breaking. It equals Compana in resistance to shattering and to the common barley diseases. Palliser yields better than Compana but matures a little later. It is not equal to Hannchen or Betzes in malting and pearl-quality. V

## Forage Crop Is Trojan Horse

A REPORT in The Country Guide more than 18 months ago warned farmers of risks involved in using sorghum alnum as a forage crop. Extensive winterkilling in Canadian tests was the main reason not recommending the crop. A further reason was that sorghum alnum had been declared a noxious weed in Washington state.

The latest word is that sorghum alnum has become such a menace in Kansas, that it has been placed on the list of noxious weeds there, too. It is a hybrid resulting from natural crossing of johnsongrass and sorghum. The resulting plant has both roots and rhizomes and can spread like johnsongrass. V

## Weather And Grasshoppers

THERE'S a close connection between the weather and grasshopper outbreaks. If a new method of predicting outbreaks by weather data is successful, forecasting will be simpler and cheaper than the present grasshopper survey method.

Dr. R. L. Edwards of the Saskatoon Research Station, who is developing this interesting idea, says that grasshopper outbreaks in Saskatchewan have followed three successive years when the temperature from July to September was above average, and the precipitation from April to August was below average. In spite of changing cultural practices and vigorous control campaigns, this relationship between grasshopper outbreaks and preceding weather conditions has not been upset.

Dr. Edwards' predictions based on weather data are being checked against the annual grasshopper forecast maps, which are based on surveys of adult grasshoppers and eggs in the fall. V

## Not the Best Kind of Spreader

"THE best weed seed and grain spreader." That's how John Howden, Manitoba weeds specialist, describes an uncovered, loaded grain truck moving along the road.

Mr. Howden quotes a case where about 24 bushels of No. 1 feed oats were lost over a 10-mile stretch from a level-loaded truck traveling at 30 m.p.h. Then there was the truck that covered 8 miles at 30 m.p.h. in an 18 to 20 m.p.h. wind and lost 17 bushels of wheat along the way. Flax blows off a moving truck even more easily.

But lost grain is not the whole story. Mr. Howden points out that commercial grains have an average dockage of 2 to 5 per cent. So a vast number of weed seeds can be scattered by this simple method.

The farmer who doesn't cover his load has an outright loss of cash from grain, plus the cost of weed control later. "Tarpaulins pay," says Mr. Howden. V

## GLOBELITE

the battery built  
for Canada's climate



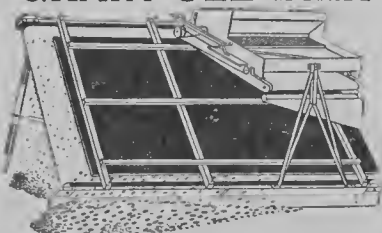
### EV-R-FUL BATTERIES

- needs water only a few times a year!
- Hydrex plates for longer life, faster starts, more power.

GLOBELITE BATTERIES LTD.

WINNIPEG REGINA SASKATOON CALGARY EDMONTON VANCOUVER  
TORONTO - KINGSTON

## GRAIN CLEANER



Combination Screen and Blanket Wild Oats Cleaner. It is the ideal cleaner for the Western Farmer.

CANCADE BROS. LTD.  
BRANDON, MANITOBA

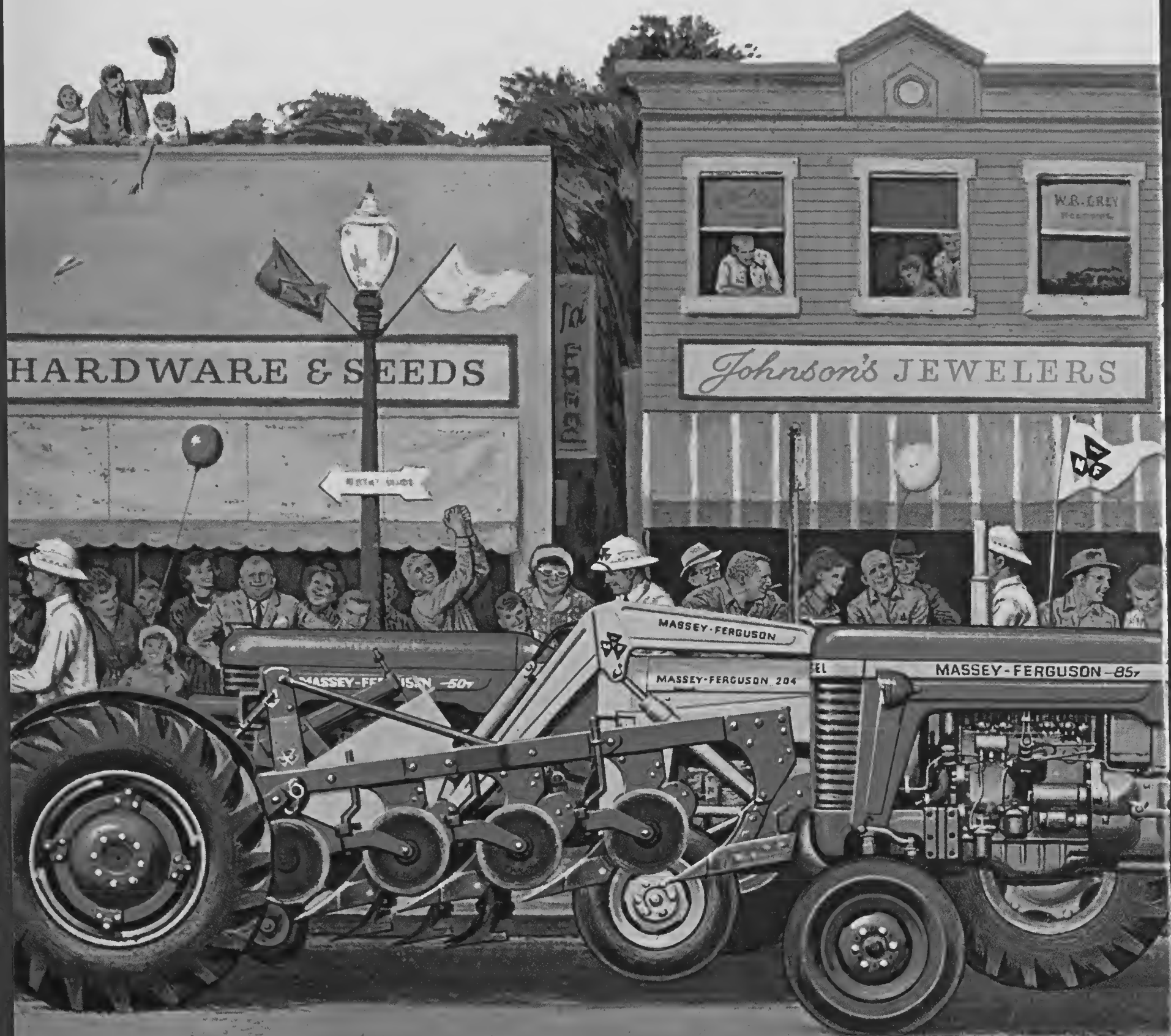


HURRAY!  
HURRAY!

**...it's "show-how" day!**

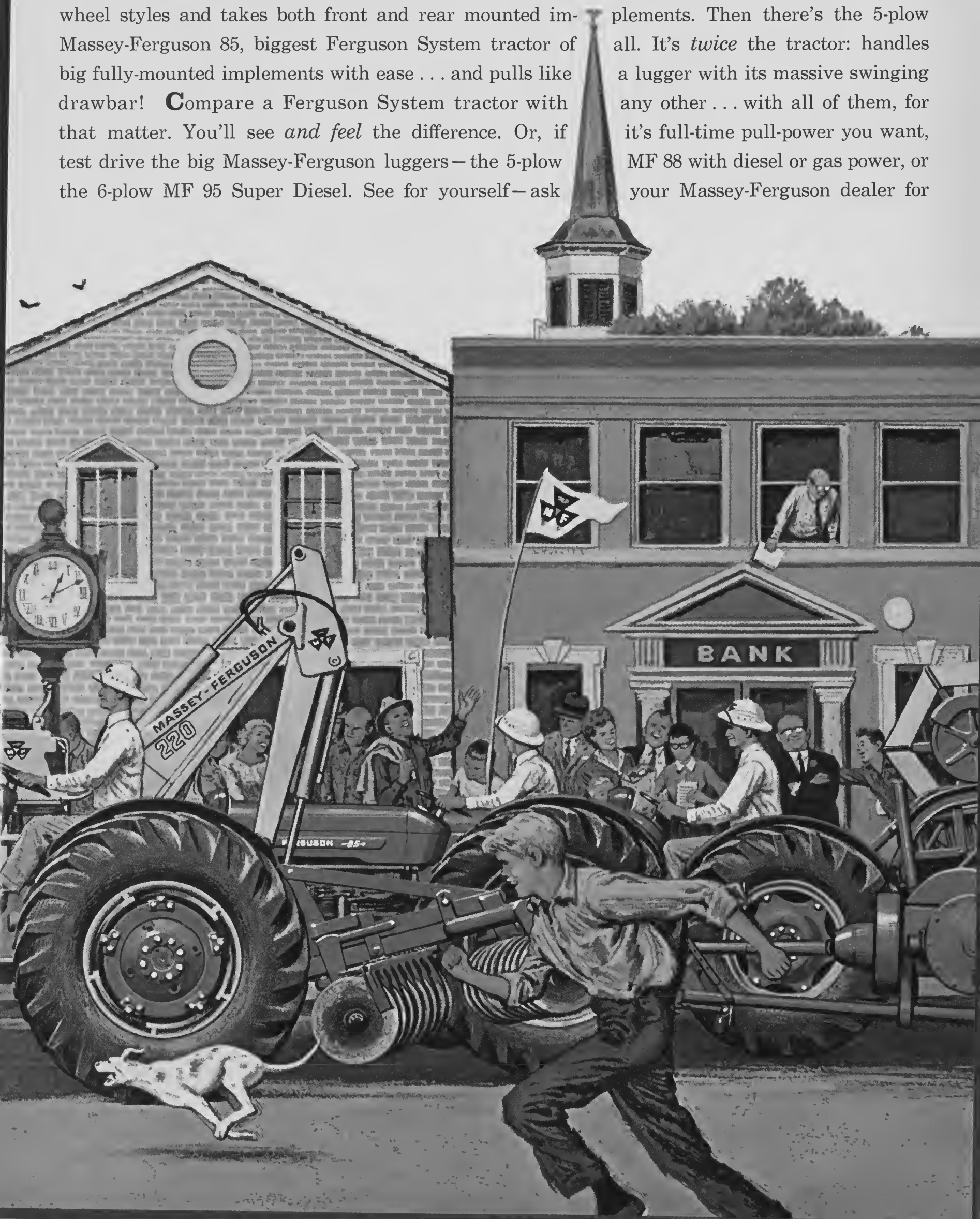


Dogs bark. Powerful engines roar. Parading by on the way to a Massey-Ferguson Show-How Demonstration outside town, you see a sampling of the big 1961 Massey-Ferguson farm machinery line. Join the crowd and watch the most advanced engineering in the business wheel by! **O**ut front are the tractors that make Massey-Ferguson the largest tractor manufacturer in the world. Tractors in every power class, for every job on every size farm. All power classes now with the modern miracle of dollar-saving *diesel* power. Or with gas or LP engines if you prefer. Outstanding industrial tractors and equipment too. How come more farmers everywhere choose Massey-Ferguson tractors than any other kind? **T**he big reason is the revolutionary Ferguson System, available *only* in Massey-Ferguson tractors. No other tractors get so much work-power out of every horsepower, on so little fuel. No other tractors give you such precise implement control. Such handling ease and manoeuvrability. Or such fatigue-free work comfort. **T**ake a good look at the great Ferguson





System tractors! That's the brand new 3-plow Massey-Ferguson 35 out there leading the parade. It's the new and improved model of the best selling tractor in the world! Next comes the Massey-Ferguson 65, the all-job 4-plow tractor that handles light chores with amazing fuel economy, yet has power a-plenty for heavy work. The 3-plow Massey-Ferguson 50 comes in 4 front-wheel styles and takes both front and rear mounted implements. Then there's the 5-plow all. It's *twice* the tractor: handles a lugger with its massive swinging any other . . . with all of them, for it's full-time pull-power you want, MF 88 with diesel or gas power, or your Massey-Ferguson dealer for





proof of performance right on your own land. **HAY TOOLS?** Massey-Ferguson has 'em all. Every one a "weather beater" . . . engineered to get you into the field faster and *keep* you on the go. Take, for example, the unique minute-mount Dyna-Balance Mower. You, by yourself, can fully mount it to your tractor in one minute flat! Or take the big-capacity Balers, the only ones made that need no messy, time-wasting daily greasing. Just two examples of Massey-Ferguson's engineered-ahead Hay Tools. There's everything else you need to do a better job, too . . . from Side Delivery Rakes to Forage Harvesters! **THRILL TO THE GIANTS OF THE HARVEST** . . . the sleek, low-profiled "prairie cruisers" every farm boy dreams of commanding. Now these superbly engineered machines are named Massey-Ferguson Combines instead of "Massey-Harris." These are the combines that make Massey-Ferguson the largest manufacturer of self-propelleds in all the world! **Why** this undisputed leadership? No. 1 reason: top capacity with minimum field loss . . . in every kind of grain,



and in corn, beans and flax. Handling ease is another reason. Massey-Ferguson engineers design these self-propelleds from the ground up with the operator's comfort and safety in mind. They are lower and more compact; provide all-around visibility. They're easiest to handle in the field; easiest of all to transport and store. With a lower centre of gravity, they are safer even in rough and sloping fields. **T**ake the big-acreage Massey-Ferguson Super 92 SP Combine. It is engineered to deliver 20% more capacity than any of the previous models that set the performance standards of the industry! **O**r if you work a family-size farm, consider the fast-stepping "8-footer," the Massey-Ferguson 35. It's the lowest priced self-propelled on the market. Yet it out-combines anything, anywhere near its size! **I**n between, there's one for every size or kind of harvest job. There's the proven MF 82 Harvest Streamliner. The MF 72 SP for medium to large farms. The MF 35 and MF 72 pull-type models and the famous MF 30 Pull-Type Swather. Whatever your needs, these are the world-renowned harvesting



machines to see! **CORN GROWERS**—notice the MF 62 Fully Mounted Corn Picker. It ends the daily greasing chore! See too the rugged new MF 20 Corn Head that fits all Massey-Ferguson self-propelled combines. And everybody take a good look at Massey-Ferguson's big line of plows, tillage tools, planters, loaders, wagons . . . everything any farmer anywhere needs. From soil preparation right through the harvest's end, your Massey-Ferguson dealer is set up to take care of all your needs . . . from the smallest replacement part or service job, to the biggest implement or machine. **Before** you buy anything this year, you owe it to yourself to see how Massey-Ferguson's advanced engineering can help you farm your land more profitably. Look, compare . . . you'll *know* why Massey-Ferguson is the world's largest manufacturer of tractors and self-propelled combines. Stay with the crowd! You've only seen part of the Massey-Ferguson line go by. There's more . . . lots more! The big **Massey-Ferguson** parade of farm machinery goes on . . . and on . . . and on.





# Pasture Champion Is 40-Acre Dairyman

TRY to tell just about any dairyman today that it's possible to make a living on a 40-acre farm and he'll snort in disbelief. Today's philosophy is one of big farms, and still bigger farms. But Albert Whittaker wouldn't laugh. In fact, he is doing it himself. He milks 23 Jersey cows, handles about 10 yearlings as well, and grows all the roughage he needs for the herd by turning over the entire farm—his 40 precious acres—to forage crops.

His forage program is good enough to startle even the pasture experts. Down in Nova Scotia, where government and Federation of Agriculture people started a pasture competition last year, his forage program so impressed the judges that they named him the province's first pasture champion.

Whittaker is a stocky white-haired farmer who has doggedly refused to get caught up in the modern swing to bigger cultivated acreages, and, as he notes wryly, the big expenses that go with them. He has an old-fashioned faith in the soundness of good husbandry when it comes to dairy farming, and it shows right through his program.

His permanent pasture (he has 8

acres of rough pasture as well), which carries the herd through spring and early summer, is a little patch of about 8 acres divided into 4 separate fields. The herd is rotated from one field to another every 3 or 4 days. If they can't graze off all the early growth, he might clip it for hay as well. He doesn't fertilize it in early spring, because "any fool can grow grass then. It's the summer and fall that call for extra planning."

But Whittaker does plan carefully. In July, he top dresses the pasture with 400 lb. per acre of 0-20-20, and gives it a boost a month later with nitrogen. Of course, 8 acres won't carry the herd through the summer and fall months, but he has ways of providing feed for then as well. He seeds about 2 acres to oats—often a field that he is seeding down—and has this ready for grazing when pastures taper off in late July and early August. Meanwhile, he has been clipping his hay fields early, for silage for his tower silo, and later for hay. By mid-summer, aftermath from his 20 acres of hay will be ready. Here again, he may do some juggling. In a good season, he might have enough pasture to be able to use some of the aftermath as hay.

Pasture champion Albert Whittaker (r.) is seen here talking about dairying with local ag. rep. Harold Wilson.



[Guide photo]

Albert's fall and early winter roughage program depends on a crop that has long since been abandoned by most farmers in the country—a couple of acres of turnips. Half of them are an early variety to be fed on pasture. A later variety provides succulent feeding right through to Christmas time, when he opens the silo.

THIS carefully planned forage program laid out virtually on a week to week basis, has been the key to Whittaker's success for a lifetime on the farm, but it never had a tougher trial than this past summer. Nova Scotia normally has rain in abundance. It has a reputation for being one of the best grassland areas in the country. Last summer, it had the severest drought that most farmers can remember. It forced hundreds of them to feed hay through the normal pasture season. Hay prices climb in winter as farmers run short. But this hasn't hit Whittaker.

"I have fed a bit of hay—not much," he said in October. "I'll have plenty to carry me through the winter." He didn't mention it, but he probably reflected on how pasture management and emergency and supplementary crops like green oats and turnips have helped to put money in the bank for him too.

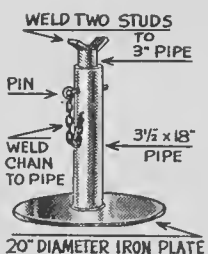
Since he doesn't grow any grain Whittaker buys a 16 per cent protein dairy ration, and feeds this lightly to the cows—about 1 lb. of it for every 5 lb. of milk, so long as the cows are giving over 20 lb. of milk.

Now that one of his boys seems likely to stay home on the farm with him, Whittaker has decided he must expand some to make it a 2-family farm. His first step has been to get an additional 13 acres of reclaimed marshland nearby, which will give him additional hay, enable him to extend his pasture program at home and to expand his cow herd.—D.R.B. ✓



## Jack Stand

To avoid accidents when jacking or hoisting our trucks, we have made two stands like the one shown in the sketch. These are useful insurance in case a chain breaks, which has happened already, or a jack slips. To make a stand we took an 18" length of 3½" pipe and welded it to an iron plate, 20" in diameter, for the base. A short length of chain with a pin attached was welded to the pipe. Then a hole was drilled right through the pipe to take the pin. A short length of 3" pipe, with two studs welded to one end, was also drilled with a hole to take the pin. The smaller pipe fitted into the larger one, and an adjustable stand was completed.—E.M.T., Alta. ✓

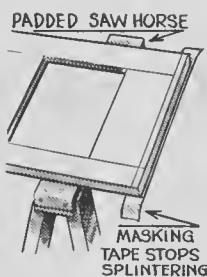


## Oil and Grease Storage

Most farms have storage tanks for fuel, but they are kept away from the buildings for safety. The grease and oil for the tractor are in a building, and you take time going back and forth. If you build up the sides of the fuel stand with plywood or aluminum, making a door in it, you can keep your oil and grease handy and out of the sun and rain.—A.C.B., Sask. ✓

## Cutting Doors

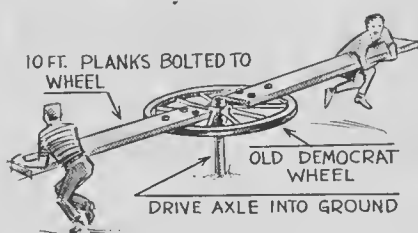
The next time one of your doors drags on the floor, and you have to take it off to cut it, try this method: Make a pencil mark across the door where the cut has to be made. Paste a masking strip to opposite side directly under the mark. Use a fine-tooth No. 11 or 12 saw, and saw right through the tape. You will see that the crossgrain in the wood has not splintered, and the painted or varnished surface is unmarred.—H.E.F., Tex. ✓



## Non-Skid Paint

Make your own abrasive non-skid paint by adding a quart (dry measure) of clean sand to a gallon of finish. The sand will not affect the color, it brushes easily and provides a safe surface during wet or dry conditions.—H.J., Pa. ✓

## Merry-Go-Round



Having an old heavy democat, which I dismantled, I took one axle and drove it into the ground, until there was sufficient to hold the wheel about 2½ ft. above the ground. With

the wheel in place, I bolted two 10-ft. planks onto it at opposite sides. This made a strong and safe merry-go-round for children.—L.S., Alta. ✓

## To Rot a Stump

Bore a few fair-sized holes in the stump and fill them with saltpeter. Then put some turpentine in and cork up the holes. Leave them for a year and you can burn out a tree, roots and all.—G.H.F., Ont. ✓

## Siding Helpers

One man can put on his siding by himself if he uses just two of these helpers. I make them from scrap spruce and straps of 16-gauge metal the same width as the thickness of the boards. Bend the metal to the shape, as shown in the illustration, and nail it to the wood block. The helper is tapped under the last row of siding to act as a holder and spacer. Make the wood blocks according to the width of the siding.—J.J.T., Alta. ✓

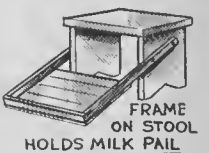


## To Clean Files

Smooth files may be cleaned thoroughly after use on soft materials like brass, solder or plastics, by using a piece of modeling clay. Press a small lump of clay down against the teeth of the file, then roll it off and it will bring the clogging material with it.—H.J., Pa. ✓

## Pail Holder

To make a pail holder for a milking stool, just nail 1" by 2" boards on the outside of the stool legs, set at an angle as shown in the sketch. Then nail a few boards underneath and a third 1" by 2" across the end. You no longer need to hold the pail while milking.—E.L., Sask. ✓

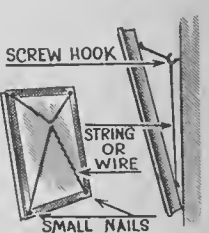


## Battery Corrosion

Corrosion around the terminals of your auto battery can be prevented indefinitely by cutting a pair of 2-inch washers from an old felt hat. Cut a hole in each piece, dab grease on both sides, remove the battery cables and slip a washer down over each battery post. Then attach the cables.—H.J., Pa. ✓

## Picture Hanging

There's no need to drive two unsightly nails into a wall when you hang pictures. A single screw-hook will do the job. As the drawing shows, you drive 4 small nails into the back of the picture frame and then fasten 2 pieces of string or wire to them. The lower strings holds the picture up, while the upper one keeps it suspended at the right angle.—H.E.F., Tex. ✓





# Was there enough fire insurance?

Everything possible was done to put it out, but it had too much of a start and within hours all that remained was a heap of rubble.

Was it insured? Was there enough to cover the loss? All too often there isn't. Just an oversight, but one that can cost a fortune when disaster strikes.

Taking it all together — the barn, the truck, the feeding equipment, the hay in the loft, plus miscellaneous items—the loss in this fire was about \$15,000.

Fire insurance—enough of it—can reduce such a tragedy to no more than a temporary setback. The lack of it can mean bankruptcy at worst, hard years of rebuilding at best.

Of course, the best way to avoid fire loss is not to let it happen. It would be a good idea to go over your buildings today and make sure you're not taking any risks you don't have to. A few items to check: lightning rods, electric wiring, heating plant and chimneys. Don't keep gasoline where it doesn't belong.

And, just in case you have a fire in spite of your care, check the amount of your fire insurance and particularly at each renewal date. Your U.G.G. insurance man can help you make sure that if fire should hit you, you will be able to get rolling again fast. It will pay you to see him.

## UNITED GRAIN GROWERS

**INSURANCE AGENCIES LIMITED**

Offices at **CALGARY** and **WINNIPEG**

*Represented by Agents at Over 700 Points in Western Canada*

## Fertilizer Returns In Dollars and Cents

**E**XTRA production costs are more than covered by bigger yields, and the land is kept in better shape, according to John Hoas of Meadows, Man., who has been using fertilizers on pasture, hay and grain.

In 1959, John had tried fertilizing some brome and alfalfa, leaving a check strip, and found he was not getting much more than half the yield of hay from the untreated strip that he got from the fertilized area. So in 1960, with help from Cominco, he decided to make more tests.

The main project was on his pasture, where he had 30 Holstein milk cows on a total of 30 acres. A center section of 10 acres received 27-14-0 fertilizer at 175 lb. per acre on May 9, while the two outer sections were left untreated. The idea was to rotate the cows for 10-day periods on each 10-acre field. As it turned out, the season was so dry that the cows had to spend more time on the fertilized field or starve, and they stayed on it right through a rainless July. Even so, while growth was almost negligible on the unfertilized and lightly grazed fields, the cows could still find sufficient grazing on the fertilized area in August, with the help of some hay at milking time. By mid-August, the most noticeable growth on the center section was June grass, but after only one rain, the tame grasses were starting to come back.

Having made up his mind that pasture fertilized for \$8.75 per acre had paid right down the line, John decided to try fertilizing half of the pasture in the fall, and the other half next spring. He is looking for the kind of program that will suit his land best.

John Hoas also ran tests on his hay land in 1960. He applied 16-20-0 to a brome-alfalfa mixture at 150 lb. per acre, and reckoned it increased his hay yield by about half a ton per acre. The cost of fertilizing was \$6.30 per acre, and the value of an additional half-ton of hay



[Guide photos]  
John Hoas (left) showing his pasture to Ken Stewart of The Country Guide.

about \$7.50. The crop was so high that he used a swather. He says this gave him better windrows, and the hay was much easier to pick up than the usual crop.

Altogether, John has 100 acres of tame hay, about 35 acres of slough hay, and another crop on rented land. With higher yields from his own fields, he would probably be able to get along without the rented land.

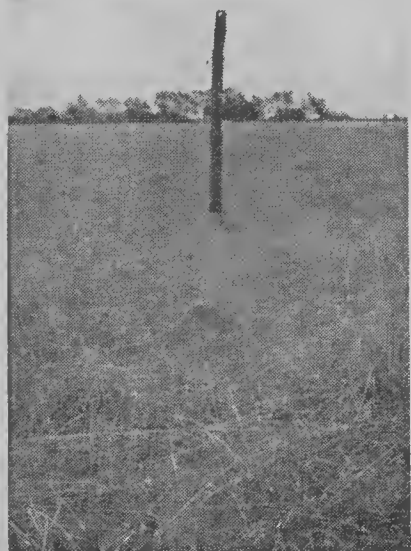
**H**OAS also decided to see if it would pay to fertilize wheat. He used 60 lb. of 11-48-0 per acre for Selkirk wheat on summerfallow, and even after several weeks without rain, saw his crop coming along strongly and competing successfully with some tough weeds, like Canada thistle. The cost of fertilizer was \$3.37 per acre. He increased his yield by 11.2 bushels per acre, giving an additional return of about \$10 per acre, after paying for fertilizer.

Another test was made with 16-20-0 at 65 lb. per acre on second-crop barley, which showed a significant improvement of 16.5 bushels per acre above unfertilized yields. With fertilizer costing \$2.61 per acre, he was almost \$12 ahead.

Because most of his land is fairly clean and wild oats are not giving much trouble, John Hoas thinks it would pay to fertilize instead of summerfallowing. He would reduce the rate to about 40 lb. per acre on land that is having second treatment. What he has in mind is a program of fertilizing 3 years out of 4. "A crop doesn't take all the good out of the land in 1 year," he says.—R.C. V

### Aster Yellows

**W**EEED control will reduce the source of aster yellows virus and reduce crop damage, according to P. H. Westdal of the Winnipeg Research Station. Such weeds as stinkweed, flaxweed, prickly lettuce and ground sorrel are known to be the chief sources of virus for locally developed carriers—leafhoppers. V



Growth of fertilized grass after dry spell is in contrast to the lack of growth in unfertilized field beyond.

**"FOR LARGE SMOOTH SURFACES—  
WEATHERPROOF AND WITH FEW JOINTS—  
ALWAYS BUILD WITH FIR PLYWOOD"**  
Plans of farm structures are available from your lumber dealer

Waterproof Glue — **FIR PLYWOOD** — Plywood marked **PMBC EXTERIOR** has waterproof glue. Western Softwood Plywood, also available, is End-Marked **PMBC WATERPROOF GLUE WSP**. Plywood Manufacturers Association of B.C., 550 Burrard Street, Vancouver 1, B. C.  
Field Offices: Vancouver • Winnipeg • Ottawa • Toronto • Montreal

F-60-3

*When Writing to Advertisers  
Please Mention The Guide.*

Why are more and more good  
swine raisers buying our

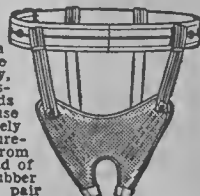
#### ENGLISH LARGE BLACK?

There is only one reason—they know from the experience of their neighbors and friends that English Large Blacks will make them more money in a cross-breeding program than any other breed. Ask about our package deal. Also available: Blue Spotted Hybrids on a finance deal, Landrace. Catalogue.

**TWEDDLE FARMS**  
Fergus Ontario

**Such SAFE Comfort for  
Reducible Inguinal  
RUPTURE!**

Rupture-Gard makes you more comfortable two ways—in body, because no cruel pressure grips and binds you—in mind, because rupture feels so safely supported! Rupture-Gard is suspended from the waist. Double pad of firm molded foam rubber holds rupture like a pair of hands—moves with body, no matter how sharply you move. Washable; adjustable as trouser-belt. 30-day trial—money-back guarantee. Order today—\$9.95 postpaid—just give waist measure.  
**PIPER BRACE (CANADA)** Dept. CGW-21  
7024 Cote des Neiges Road, Montreal 26, Quebec





# ELEPHANT BRAND FERTILIZER PAID FOR THIS TRUCK



This is an example of what can be bought with profits from the use of fertilizer. The money could have been used for a new car, a college education or any one of a hundred things that make for better living.

By fertilizing with Elephant Brand you can increase the profit from each bushel of crop. With Elephant Brand you grow more, your cost of production is spread over more bushels, so you lower the production cost of each bushel and increase the difference between cost and selling price — that difference is your profit.

## GET A BIGGER PROFIT "SLICE"



WITHOUT FERTILIZER



WITH FERTILIZER

Think of this "pie" as the money you get for every crop unit you grow. The darkened portion is your profit. Fertilizer helps you get a bigger profit "slice".

*This table shows how Elephant Brand fertilizers give you Lower Production Cost per bushel and more profit on your wheat, oats and barley.*

	WHEAT		OATS		BARLEY	
	Unfertilized	Fertilized	Unfertilized	Fertilized	Unfertilized	Fertilized
Yield per acre (bu.)	20	30	40	58	28	44
Production cost per acre (summerfallow)	\$17.00	\$19.75*	\$17.00	\$19.75*	\$17.00	\$19.75*
Production cost per bu.**	.85	.66	.43	.34	.61	.45
Value of crop per bushel	1.25	1.25	.50	.50	.75	.75
Profit per bushel	.40	.59	.07	.16	.14	.30
Profit per acre	8.00	17.70	2.80	9.28	3.92	13.20
<b>EXTRA PROFIT PER ACRE</b>	<b>\$9.70</b>		<b>\$6.48</b>		<b>\$9.28</b>	

\*Includes approximate cost of 50 lbs. per acre of A.P. 11-48-0.

\*\*Production cost per bu. calculated to nearest cent.

## Choose ELEPHANT BRAND Fertilizer and get these plus values

- A wide range of water soluble, high analysis fertilizers.
- Free-flowing uniform, pelletized products.
- Strong, weather-resistant, non-slip bags for fast handling.
- Fast, reliable service assured by adequate dealer stock.
- Advice on fertilizer programing from a man who knows fertilizer — your Elephant Brand dealer.



### It pays to choose from the Elephant Brand line

11-48-0	16-48-0	16-20-0	23-23-0	27-14-0
10-30-10	13-13-13	14-14-7	AMMONIUM SULPHATE (21-0-0)	
NITRAPRILLS (33.5-0-0)		UREA (45-0-0)	ANHYDROUS AMMONIA (NH <sub>3</sub> ) 82-0-0	

# Elephant Brand

## water soluble FERTILIZERS

Manufactured by **COMINCO**

THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED

Sales Offices: Calgary - Saskatoon - Winnipeg - Montreal - Vancouver

1203

**GET MORE FROM YOUR LAND WITH ELEPHANT BRAND**

## Lower Protein in Ont. Feed Grain

**F**EED manufacturers have reported low protein content in the 1960 Ontario wheat, oats and barley crops. Averaged out, the protein level for oats is 9.5 per cent, barley 10 per cent, and wheat 9.5 per cent.

Reporting these figures, and cautioning that the sampling is by no means complete, Dr. D. N. Huntley of the Ontario Agricultural College says that the proportions of grain to concentrate in home-mixed rations might have to be adjusted. Pig feeds especially will be affected.

Garnet Norrish of O.A.C. recommends 17 per cent protein for creep feed and starters, 15 to 16 from weaning to 110 lb., 13 to 14 from 110 lb. to market weight, 15 to 16 for breeding boars and nursing sows, and 14 for dry sows.

In the past, Ontario farmers have obtained these feed levels with an oats and winter wheat protein percentage of 11 and a barley percentage of 12. A pig feeder who feeds to borderline levels would find himself in trouble if he mixed the same proportions of 1960 grains and concentrates. But concentrate prices are lower at present, and it won't be too expensive to raise the concentrate levels in the ration if you feel the protein of the grain is down, says Norrish.

A 5-3-2 mixture of barley, oats and wheat from the 1959 crop averaged just under 12 per cent protein, while the 1960 grains would probably average 10.5 per cent. This means that while 84 parts of 1959 farm grains and 16 parts of 38 per cent hog concentrate made a 16 per cent hog-grower ration, the same ratios of 1960 grains and concentrate would give about 15 per cent total protein. This would be at the minimum range for a hog-grower ration, and a farmer might have to increase the amount of protein concentrate slightly.

Slow growth is the most obvious sign of a low or borderline protein ration, says Norrish. If adjustment is needed, an additional 25 to 50 lb. per ton of 38 per cent hog concentrate should be enough to make a good growing feed. Other hog feeds need a proportionate increase. V

## On an Old Slough

**F**ACED with an 85-acre slough that was overgrazed some years ago, and now had foxtail as its major crop, a North Dakota farmer was forced to overgraze other pastures with his herd of cattle.

In the spring of 1959, he decided to seed the slough with 8 lb. of reed canary grass and 2 lb. of tall wheatgrass. A year later, he started to pasture his cattle on the slough. Now his pastures are all moderately grazed and his cattle never lack grass.

The canary grass is a high producer and keeps growing well into the fall, and he finds the combination of high moisture and lush green leaves makes excellent cattle feed. V

## HORTICULTURE

### Diuron and dalapon as a pre-emergent



[Guide photo]  
Glen Anderson in a potato field which has been kept free of weeds by use of herbicides in experiments carried out at Ontario Agricultural College.

## Herbicide for Weeds in Potatoes

**M**OST important news for potato growers this year is the success achieved with chemical weed control last season. Now, Ontario growers will probably turn to it in a big way for it will:

- eliminate late-growing weeds that interfere with harvesting.
- eliminate about three cultivations, without interfering with yields.

The treatment, which was tried on fields across the province for the first time last year, is a pre-emergent one.

Here is how it is done. After the potato crop is seeded, the rows are hilled up, and then an application of 1 lb. diuron (Karmex) in combination with 4 lb. dalapon is made. This must be applied before the potatoes emerge from the ground. No further weed control practices will be required on the field through the summer. However, if heavy rain flattens out the hills, it will be necessary to throw the soil back up over the rows again. Since this may leave all the chemical over the rows, and none between them, cultivation may be required later.—D.R.B. ✓

## New Woody Ornamentals

**T**HERE are eight new trees and shrubs, all tested for hardiness and ornamental value, which are recommended for the Prairies, reports W. A. Cumming of the Morden Experimental Farm.

**Dogwoods—Pagoda** grows tiers of branches that blend with the low lines of the ranch-style home. **Gray** is a dense, rounded shrub with attractive medium-green foliage and bright-red seed stems that remain for some time after the berries fall.

**Rosybloom crabapples—Rudolph** has large, cup-shaped, bright pink flowers, and small but highly colored

fruit. This was the only red-flowered variety that bloomed freely at Morden after severe late frosts in the spring of 1959. **Sutherland** is outstanding for its dark, bronze-red foliage. The flowers are bright red and the fruit is small and dark red with a waxy coating.

**Savin junipers**, both forming a green, dense mat about 8 ft. in diameter—**Skandia** grows 1 ft. high and has slightly finer foliage than **Arcadia**, which grows to 2 ft.

**Spireas—Snowwhite** is a hybrid between Korean and Threelobe. It forms a compact bush up to 4 ft. high, and its arching branches are covered profusely with large, pure white flowers, blooming a little later than most other varieties of this type. In the fall, its leaves take on brilliant tints of yellow and orange. **Crispa** is a sport of the dwarf variety **Anthony Watered**. It bears large, flat clusters of red flowers from midsummer to late fall. Its value as a dwarf ornamental is enhanced by its large, crinkled and deeply serrated leaves, which are quite different from those of the parent variety. ✓

## New Tomato Is Named Vogue

**A** NEW staking tomato from the Vineland Experimental Station, Ont., is named **Vogue**.

**Vogue** was developed particularly for the Niagara Peninsula. It will largely replace **Harkness**, and in some cases replaces **Earliest-of-All**. **Vogue** is at least 2 or 3 days earlier than the other two, and also larger, averaging 4.3 oz. in station tests.

The fruit of **Vogue** is deeper than that of standard varieties, and usually very smooth. When green, the fruit is uniformly light green with no dark green shoulder, so it ripens uniformly. The plants are vigorous and thick stemmed, with 5 or 6 fruits per cluster. Some circular cracking occurs when very dry weather is followed by excessive rain or irrigation. ✓



## It's the man from Imperial Bank lending a hand!

Imperial Bank lends the farmer a helping hand in many ways. What are *your* needs? New farm equipment . . . quality livestock . . . improvements to farm buildings? Imperial Bank can help you through a low-interest Farm Improvement Loan. Talk to your local Imperial Bank Manager about it. Chances are the Man from Imperial will be "lending a hand" at your place.

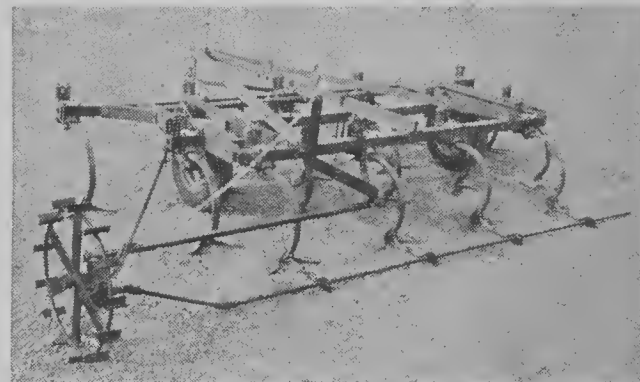
## IMPERIAL

*the BANK that service built*

0056

## Victory Rod-Weeder Attachment

New!  
Unique!  
Standardless!



- ★ Makes a firm and level seed bed
- ★ Flexible and trouble free in rock
- ★ Insures good weed kill—light draft
- ★ Low cost and maintenance
- ★ Attachable to all types of blades and cultivators

Manufactured and Distributed by

**Victory Equipment Ltd.**

920 2nd Avenue A North  
LETHBRIDGE, ALBERTA

**SEE YOUR DEALER OR WRITE**

## .. READY TO ASSEMBLE

EASY TO MAKE

## SADDLE KITS

EASY TO ASSEMBLE

NO EXPERIENCE REQUIRED

The only saddle in the world that anyone can complete. Fits your horse and you too! **SAVE BIG MONEY!** Double rigged, 15" seat, all parts pre-cut, including stirrups. Cheyenne roll, full size fenders, easy instructions.

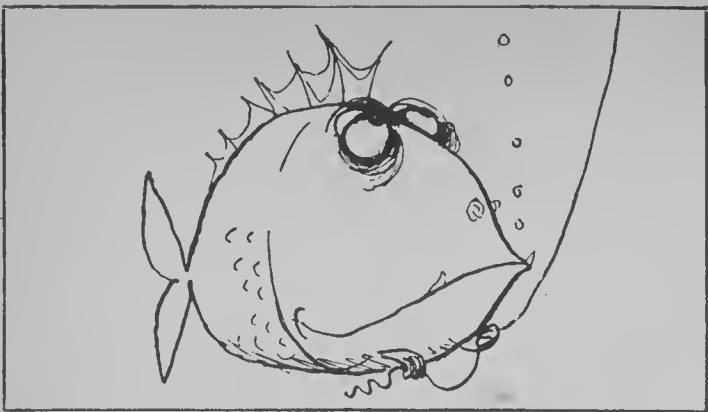
Write for Free Catalog

**TANDY CLARKE and CLARKE**  
Box 340-DW Barrie, Ontario

## GETTING UP NIGHTS

Makes Many Feel Old Before Their Time

There is nothing that can make you feel older and more depressed than losing sleep and worrying about Getting Up Nights (too frequent, burning and itching urination). Backache, Bladder Cramps, Strong, Cloudy Urine, or Rheumatic Pains due to Kidney and Bladder Irritation. In such cases New Improved **CYSTEX** usually gives quick, wonderful, soothing relief as an antiseptic in acid urine and by relaxing, pain relieving action. Get **CYSTEX** from druggist today. Feel better fast.



**YOU SHOULD HAVE SEEN THE ONE THAT GOT AWAY**

In the beginning it was a question of who ate whom. For a while it must have been touch and go whether man went fishing or fish went manning. Looking around we assume man won out. At first man competed with earth's other creatures—today men compete with other men to develop nature's energy sources. In the process our standard of living has sky-rocketed.

Competition has helped Canadians achieve one of the world's highest living standards. Take the way it works in the oil business—Imperial Oil and hundreds of other companies compete to supply Canadians with oil. As a result, oil is available at reasonable prices wherever it is needed—and Canadians have turned to oil for more than half their energy needs.

**IMPERIAL OIL LIMITED**  
...for 80 years Canada's leading supplier of energy

**DOMINION SEED HOUSE**



**FREE!**  
**TO ANYONE**  
**INTERESTED**  
**IN GARDENING**  
**AND PLEASANT**  
**HOME**  
**SURROUNDINGS**  
**SEND TODAY!**

**OUR BIG 1961 SEED AND NURSERY BOOK — FINEST EVER**

164 pages with over 500 illustrations to tell you all about the loveliest and finest things to make your 1961 garden the most pleasurable ever. The best and newest in flowers, vegetables, fruits, strawberry plants, roses, houseplants, bulbs, nursery stock. Marvellous new chemical garden aids. Many other accomplishments of the scientist's skill and plant breeder's art, plus the FRIENDLY services of an organization CONTINUOUSLY devoted to the interests of Canadian Gardeners. Let us tell you more. Just clip and mail coupon—today.

DOMINION SEED HOUSE, GEORGETOWN, ONTARIO 30W

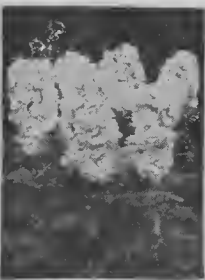
Please send FREE copy of 1961 Dominion Seed and Nursery Book. I have not received my copy.

Name .....

Address ..... Dept. 55

**FOR A BETTER 1961 GARDEN**

BURPEE'S DOUBLE GLORIOSA DAISY,  
and HYACINTH FLOWERED SNAPDRAGONS  
FLOWER, GARDEN AND LAWN SEEDS, EXHIBITION  
VARIETIES OF GLADIOLI, DAHLIA, NEW VARIETIES  
IN GLOXINIA and BEGONIA BULBS.  
PLANTS, TREES, SHRUBS, FRUIT TREES  
NEW TOMATO VARIETIES



We will be glad to send you a copy of our new catalogue.

NAME .....

ADDRESS .....

**PATMORE NURSERIES LTD., Brandon, Man.**

**HORTICULTURE**

**Joint Effort  
To Improve the Saskatoon**

by PERCY H. WRIGHT

IT was the discovery of a hybrid between the mountain ash and the saskatoon berry which opened up an intriguing vista of possibilities for the improvement of the native prairie fruit commonly known as the saskatoon. This led to the suggestion that the breeding project should be a community effort. From there it was only one step to the suggestion to organize a society for this purpose.

At the moment, the Society for the Improvement of the Saskatoon is only loosely organized. But, already membership has got to the point that something a little more formal will be necessary. Probably we can carry on without fees for the first year, and in the second year will ask members to send in 25 cents or so, just enough to cover postage and stationery expenses. Since membership will be widely scattered, election of officers, which will be desirable soon, will have to be by mail.

Plant-breeding work in the saskatoon will divide itself into several distinct lines. One will encourage the collection of superior wild strains of saskatoons wherever berry pickers come upon them. Such large-fruited, productive strains are known to exist in fair numbers in all three prairie provinces. At least two, Smoky and Pembina, have already been multiplied by the Beaverlodge Experimental Station in northern Alberta. If, at the time that berries are picked, the seed of some of them is saved, one step in the improvement program will have been taken. However, plants with good berries should be marked, so that the finder can come back later, in the transplanting season, and dig up suckers.

Sucker plants will always produce fruit equal in quality to that of the parent plant, but seedlings will not necessarily do so. When a wild plant is transplanted, the top should be cut back to the ground line or an inch or so above it. Nursery grown plants are easier to move and so need not be cut back so severely.

Superior wildlings will provide an opportunity to cross them together, and so get still larger fruits. This is the method of attack which has resulted in the recent development of large-fruited blueberries and the establishment of a blueberry-growing industry. There is no reason to suppose that saskatoons should not be similarly responsive to selection-plus-interbreeding.

A second line of effort might consist in crossing the prairie saskatoon, Amelanchier alnifolia, with the juneberries of other provinces and countries. In the Maritime Provinces a related species named Amelanchier laevis occurs, which includes strains "with berries as large as small crab-apples." A cross between it and the prairie species might yield pleasing results.

A third line of effort will undoubtedly consist of attempts to cross the saskatoon with more distantly related members of the rose family. It has already been crossed with the European type of mountain ash, and so the cross with the native mountain ash of northern Saskatchewan should originate even harder hybrids.

IF the saskatoon will cross with mountain ashes, one would be inclined to say that there is an equal chance of its crossing with hawthorns, cotoneasters, pears, crab-apples, and apples. The valuable feature of the saskatoon is undoubtedly its flavor, and if nothing came of such a cross except the origination of a saskatoon-flavored pear or apple, the attempt would be well worth the making.

Apart from increase of size, the saskatoon needs improvement chiefly in two respects. Its juice is excellent, but the flesh is woody. If the tender flesh of the apple could be transferred to the saskatoon, something of definite value would be accomplished. Secondly, strains of the saskatoon which bloom later in the season, and so avoid spring frosts, are much needed.

It seems that the possibilities for the improvement of the saskatoon are immense. They surely appeal to the imagination, and no one can contend that the saskatoon is not adapted to the prairie climate.

Any reader who wants to co-operate in exploiting the possibilities in saskatoons (or juneberries), and wishes to join the society, should write to Percy H. Wright, care of the Star-Phoenix, Saskatoon, Sask. V

**High-Stepping  
Garden Vegetable**



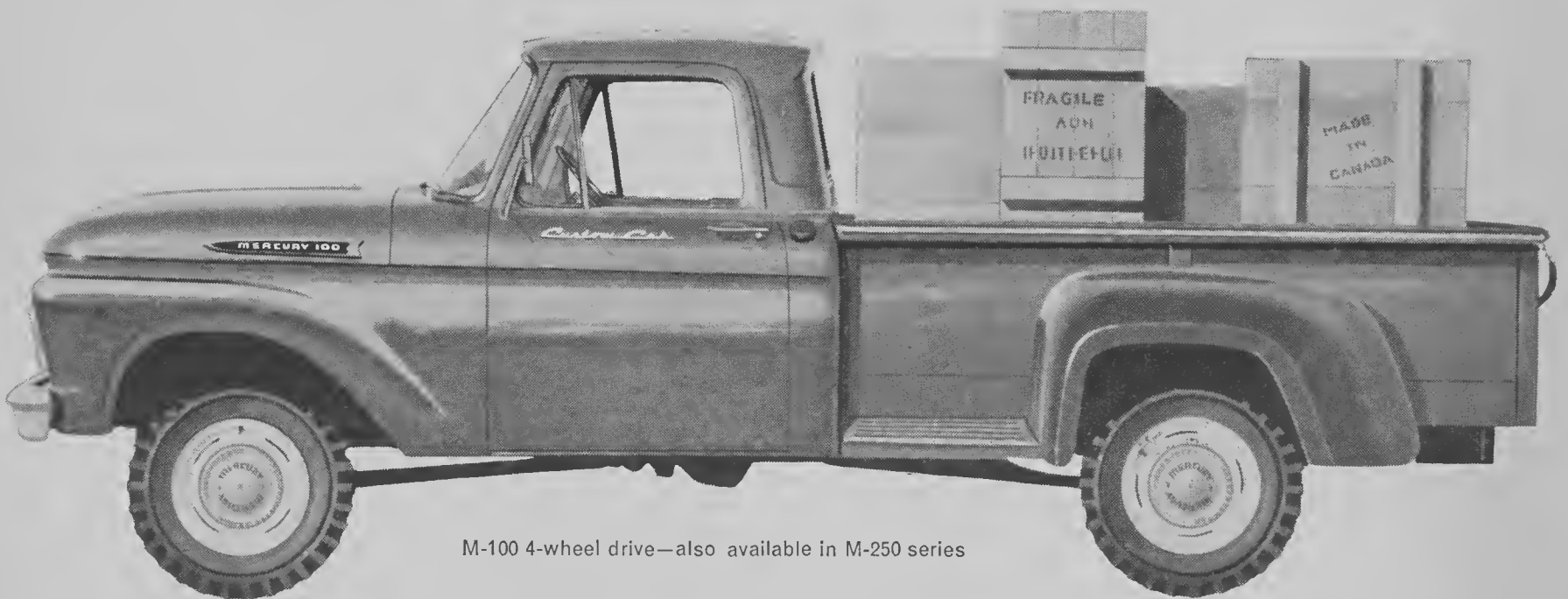
[Guide photo  
**Dancing Carrot: the Red River clay can mold carrots into odd shapes, like this item dug up last fall by Mark Pelletier of St. Boniface, Man.**





M-100 Styleside Pickup—  
Custom Cab with optional wraparound rear window.

# loaded!



M-100 4-wheel drive—also available in M-250 series

When you see the wide range of pickups your local Mercury Truck Dealer has for '61 you see what we mean by loaded. Pickups of every size, every description highlight his 1961 truck lineup . . . every one **just loaded** with payoff-proved features. Pick your job—then pick your pickup. Choose from the full Mercury range and get either regular or "go anywhere" low-priced 4-wheel drive models. You can have your choice of rugged "truck-built" six or V-8 in all models, and you get **2 mile or 12 month warranty with every model, whichever comes first.** Want style? As dependable and durable as pickups are, they just naturally want to wander into town whenever they get the chance—and they look good doing it. Increased vision with 28% more window area, and the comfort of driversized cabs are big '61 features of every pickup. Parts and service are available everywhere you drive. Your local Mercury Truck dealer is a truck dealer qualified to see that you get the right truck for any farm job. See the **BIG MAN IN TRUCKS TODAY.**

# MERCURY TRUCK dealer

# FAST RELIEF FOR ACHING MUSCLES



Now Many Wear

## FALSE TEETH

With More Comfort

FASTEETH, a pleasant alkaline (non-acid) powder, holds false teeth more firmly. To eat and talk in more comfort, just sprinkle a little FASTEETH on your plates. No gummy, gooey, pasty taste or feeling. Checks "plate odor" (denture breath). Get FASTEETH at drug counters everywhere.

*When Writing to Advertisers  
Please Mention The Guide.*



Interested in "old rellables"—Leghorn, B.R., R.I. Red, Sussex, N.H., Col. Rock, and their crosses? Write:

Fred W. Bray, Limited, 130 John N., Hamilton, Ont.

## POULTRY

### Right Bird For the Job

REMEMBER that there are two important types of chickens, and be sure you know exactly what you are buying when you order chicks, advises Prof. P. A. Kondra, University of Manitoba.

The two main types are those specially bred for egg production and those bred for meat. Within these groups are crosses or hybrids. If it's egg production you're after, look for these characteristics:

- Low mature body weight, about 4 to 5 lb.
- Continuous high rate of lay as indicated by average annual production per pullet housed.
- High proportion of "large" eggs—about 70 per cent average for the year.
- At least 90 per cent "A" quality eggs—free from blood and meat spots, and thick albumen of at least 66 Haugh units.

The first two characteristics lower the cost of production; the last two increase your revenue. Livability is also important, but this is included in "hen-housed" production, or the total number of eggs laid for the year, divided by the number of pullets placed initially in the house.

Buy stock capable of laying eggs of high quality. These characteristics are not affected to any great extent by feed and management of the flock.

You can obtain reports of national tests by writing to the Poultry Production Branch, Canada Department of Agriculture, Ottawa; or reports on the B.C. and Alberta tests by writing to the Poultry Commissioner, Parliament Buildings, Victoria, B.C., or Edmonton, Alta. Hatcheries also have reports of the tests.

Similar information is available on meat production qualities of outstanding stock. Meat producers, especially broiler growers, can obtain this information from the firm that has contracted to buy their product.

### Synovitis Is a Danger

A DISEASE called synovitis has become quite serious in the past 3 years. Dr. M. C. Connell of the Ontario Veterinary College says more birds are being condemned, particularly among broiler chickens, because of it. Also, mortality is higher than normal when synovitis is a problem among laying hens and turkeys.

How do you recognize synovitis? Dr. Connell says you may notice lameness and birds walking stiffly. If you pick up a bird and look closely, you will see swollen hocks and perhaps swollen foot pads and wing joints. Sometimes a large breast

blister is associated with synovitis. And affected birds frequently have pale combs, ruffled feathers and greenish diarrhea. Birds under 7 weeks seldom show evidence of the disease.

How do you prevent the disease? It's caused by a micro-organism which is transmitted through the egg. So the main responsibility for prevention is with owners of breeding flocks.

If synovitis is known to be present in a potential breeding flock, don't use the eggs for hatching. Clean brooding and laying pens, and disinfect them before restocking.

If synovitis is definitely established in a flock, one of the tetracycline antibiotics can be given in the feed or drinking water. But establish a definite diagnosis before treatment. Drugs can be harmful as well as costly if they're used indiscriminately.

If you spot signs of synovitis, submit birds to your veterinarian or a pathology laboratory in your province.

### Hatchery Health Program

AN improvement in the health of Canada's poultry is expected as a result of agreement by all provinces to join in a program for better fumigation of chick hatcheries.

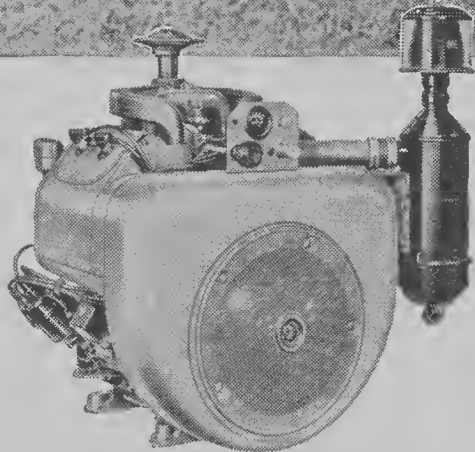
Inspectors from the federal and provincial governments are collecting incubator dust and fluff samples from hatcheries, and these are analyzed by federal or provincial laboratories. On the basis of these analyses, hatcheries are notified of the effects of their sanitation methods, or whether to take steps to reduce exposure of chicks to excessive numbers of micro-organisms.

It has been shown that formaldehyde fumigation will kill bacteria. Many hatcherymen have turned to this method for reducing disease in chicks. The program will enable them now to measure its effectiveness.



VERSATILE SWATHER, made by Hydraulic Engineering Mfg. Co., Ltd., Winnipeg, Manitoba, can also be converted into a hay tool and sprayer. A 30-hp Wisconsin provides drive and work power.

## 30-hp heavy-duty WISCONSIN gives you 3 machines in 1



Use of Wisconsin's 30-hp VH4D on the Versatile Swather demonstrates the ruggedness and dependability of the engine. Here's why: The Versatile Swather requires smooth, dependable drive and work-power in order to help you as a swather; hay tool, and sprayer — all tough, engine-sapping jobs.

The VH4D meets these requirements perfectly—helping farmers mechanize their operations with the Versatile Swather by providing precision-built, heavy-duty engine POWER day in and day out.

The VH4D is built for long life. Tapered roller bearings absorb

thrusters. Its high torque prevents stalling under shock loads. Stellite exhaust valves and inserts and positive rotators extend valve life up to 500%!

Air cooling helps by eliminating radiators, water pumps, fan belts, and other water-cooling parts. You don't have to buy, service, or replace them. And you are assured of trouble-free power at extremely high summer temperatures.

To get the most service out of your power equipment, make sure it's equipped with Wisconsin Engines, 3 to 56 hp. Electric starting available for all models. Get Bulletin S-254.

Sales and Service in Canada Supplied By These Distributors and Their Service Stations

CONSOLIDATED ENGS. & MACHY. CO. LTD.  
New Toronto, Ont. — Montreal, Que. — Moncton, N.B.  
Distributor for Ontario (less Western Lakehead area),  
Quebec and New Brunswick

MUMFORD, MEDLAND, LIMITED  
Winnipeg, Calgary, Edmonton, Regina, Saskatoon  
Distributor for Western Ontario and Prairie Provinces

NEWFOUNDLAND TRACTOR & EQUIPMENT CO. LTD.  
St. John's, Newfoundland  
Distributor for Newfoundland

CONSTRUCTION EQUIPMENT CO., LTD.,  
Halifax, N. S.  
Distributor for Nova Scotia and Prince Edward Island

PACIFIC ENGINES & EQUIPMENT, LTD. 40 E. Cordova St., Vancouver 4, B. C., Distributor for British Columbia



## WISCONSIN MOTOR CORPORATION

MILWAUKEE 46, WISCONSIN

World's Largest Builders of Heavy-Duty Air-Cooled Engines

## MUMFORD, MEDLAND, LIMITED

HEAD OFFICE: 576 WALL ST., WINNIPEG 10, MAN.  
Offices also at: Calgary, Edmonton, Regina, Saskatoon

Please send me full information on the Wisconsin Engine, and the name and address of the nearest Wisconsin dealer.

NAME..... ADDRESS.....  
CITY..... PROV.....

POULTRY

# To Keep Buildings Clean

PROPERLY disinfected and white-washed buildings keep germs away and reduce your production costs. Clean premises also indicate to prospective buyers that management is efficient and animals are healthy. Lice and other parasites are discouraged. White walls make the barn lighter.

Having listed these advantages, the Alberta veterinary services branch suggest that you clean a building thoroughly before disinfecting and whitewashing. Disinfectant is inefficient if there are large amounts of organic matter, such as straw and manure. Walls, ceilings and ledges should be brushed down with a wet broom, and the floors and sides of pens scrubbed with a lye solution. One can of lye dissolved in 2½ gallons of water is recommended for routine disinfecting. But wherever infected animals have been housed, scrub out with a solution containing two cans of lye to 2½ gallons of water, or any other good disinfectant. Be sure to disinfect feed and water troughs, too.

For whitewash that won't come off, use a stiff brush and wet cloth or hose to remove old whitewash. Then apply the new coat while the surface is still damp. If whitewash dries too quickly, chalking and rubbing are likely.

Make your whitewash solution several days ahead. Mix one bag of hydrated lime to 7 gallons of water. Dissolve 6 lb. of salt in 3 gallons of boiling water. Mix the two solutions together when they are cold. Stir 3 lb. of Portland cement into the final mixture and add a disinfectant if desired.

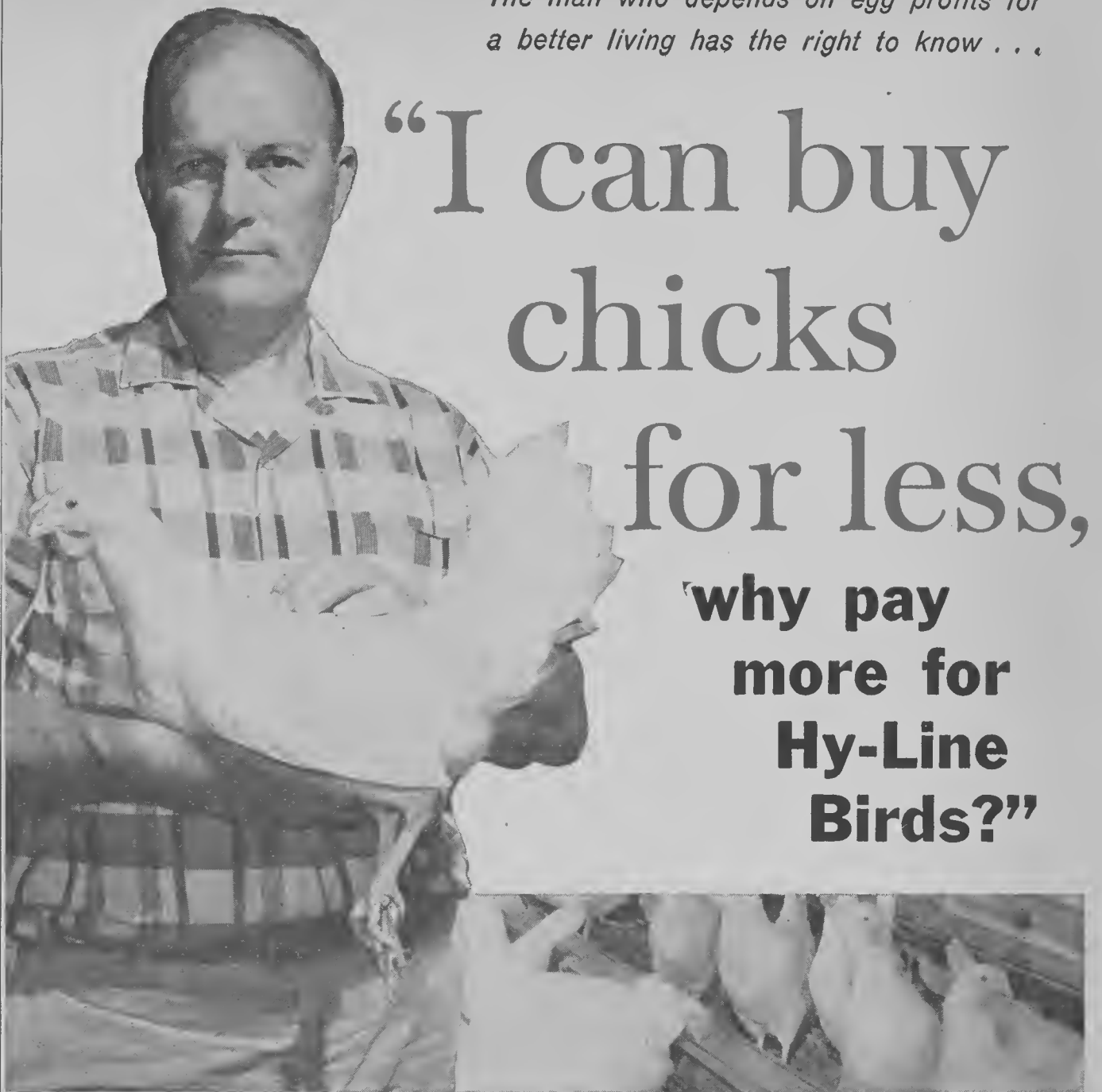
# Cannibalism And Feather-Picking

OF several methods used to control cannibalism and feather-picking in the laying flock, one of the easiest and probably the most popular is debeaking, according to the Brandon Experimental Farm, Man. This consists of removing a large portion of the upper beak. With the use of a debeaking machine there is no apparent harm, and it gives satisfactory control if it is done when the chicks are 1-day old, and repeated at hatching.

The Brandon poultrymen have had good success with "plastic specs." These specs allow the bird to feed but inhibit its vision enough to prevent feather-picking. Application of anti-pick materials, such as plastic, may be used when picking is a problem. The material is applied to the affected areas, and the bird is kept from picking.

to drinking water will an acute outbreak of under control. The salt consists of one tablespoon gallon of water administered 2 or 3 forenoons, each 3. This treatment should be continued if the outbreak is not under control.

The man who depends on egg profits for a better living has the right to know . . .



# "I can buy chicks for less, why pay more for Hy-Line Birds?"

## Answer:

It generally costs more to produce something measurably better. Usually you get what you pay for. And while Hy-Line chicks cost a little more, their extra value is impressively demonstrated when you look at all official Random Sample Tests ending in 1959 and 1960. In averaging these tests, Hy-Line 934-C layers out-earned every one of the ten other most widely entered varieties. In the two years, Hy-Line 934-C was tested against these ten other varieties for a total of 187 comparisons. Hy-Line 934-C won 135 comparisons and tied two more. This consistent performance earned Hy-Line layers more than twice as many total first, second and third places as any competitor during the two years. Official tests show Hy-Line chicks return more as layers . . . after paying back the slightly higher chick cost. That's why we say: "If eggs are your business, make Hy-Line your chick."

## Hy-Line PRECISION GENETICS

Hy-Line Precision Genetics uses inbreeding, hybridizing, and poultry blood-typing to develop Hy-Line layers that are outstanding for production, livability, feed efficiency, and large, good-quality eggs.

## HY-LINE CHICKS

a department of Pioneer Hi-Bred Corn Company of Canada, Ltd.

305 GRAND AVE. WEST, CHATHAM, ONTARIO

Registered Trademark of Pioneer Hi-Bred Corn Company of Canada, Ltd.

## AUTHORIZED HY-LINE DISTRIBUTORS IN CANADA

**ALBERTA**  
 Calgary.....Agnew-Fox Chicks, Ltd.  
 North Edmonton.....Woodman Hatcheries  
**BRITISH COLUMBIA**  
 New Westminster.....Pacific Hatchery, Ltd.  
**MANITOBA**  
 Boissevain.....Shelton Hatchery, Ltd.  
 Dauphin.....Modern Hatcheries  
 Winnipeg.....Pioneer Hatchery

**SASKATCHEWAN**  
 Moose Jaw.....Moose Jaw Electric Hatchery  
 Saskatoon.....Early Hatcheries  
**NEWFOUNDLAND**  
 St. John's.....Hillcrest Farms, Ltd.  
**NOVA SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND**  
 Port Williams, N.S.....Cyrus & Manning Eils, Ltd.

**ONTARIO**  
 Ayton.....Fisher Poultry Farm, Ltd.  
 Burlington.....Fisher Orchards  
 Chatham.....Hy-Line Chicks  
 Essex.....Neuhauser Hatcheries  
 Kettleby.....Sky-Line Farms, Limited  
 Lindsay.....Henderson Hatchery  
 Port Hope.....Curtis Chicks  
 So. Mountain.....Berryholm Hatchery  
 Stratford.....Neuhauser Hatcheries





## Cheap Way To Build a Bulldozer

by ALFRED ISAAC

HERE'S a bulldozer outfit that can be made mostly from scrap. It has been designed for a 720 John Deere, using a standard size of cylinder, but it could be adapted for other tractors.

**NOW!**  
no septic tank worries  
with **GUARANTEED**  
**SEPTO-BAC**



- Keeps Septic Tanks Active
- Cleans Drain Tiles
- Safe, Fast-acting, Prevents Odors

**only 89¢**

AT HARDWARE,  
DRUG, DEPARTMENT,  
GROCERY STORES

Write for  
**FREE**  
**BOOKLET**  
on care and treat-  
ment of septic tanks

**TILLEY'S**  
LIMITED

430 College Street  
Toronto, Ontario

## RUPTURED

**BE FREE FROM TRUSS SLAVERY**

Surely you want to **THROW AWAY TRUSSES FOREVER**, be rid of Rupture Worries. Then Why put up with wearing a griping, chafing and unsanitary truss. For there is now a new modern Non-Surgical treatment that is designed to permanently correct rupture. These Non-Surgical treatments are so certain, that a Lifetime Certificate of Assurance is given.

Write today for our New **FREE** Book that gives facts that may save you painful, expensive surgery. Tells how non-surgically you may again work, live, play, love and enjoy life in the manner you desire. Write today—Dept. H8705  
Excelsior Medical Clinic, Excelsior Springs, Mo.

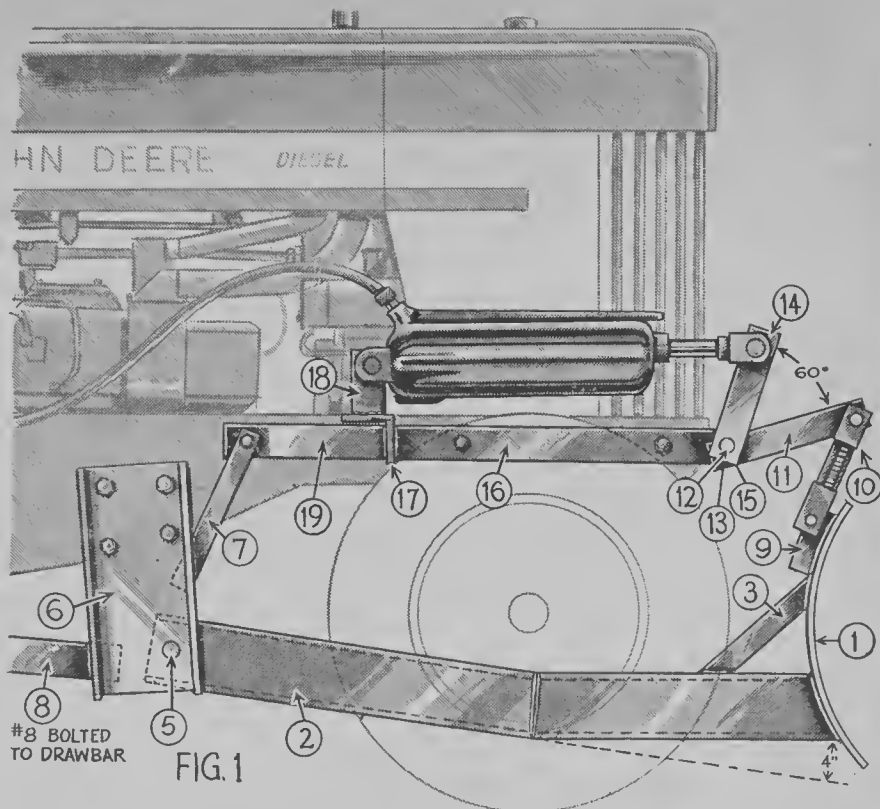
The main part of the blade is taken from a pair of steel wheels, 10" wide and 32" high. The spokes are removed and each wheel is cut into 4 equal parts, making 8 sections to be welded together into a blade 80" wide and about 2' high—see (1).

Next, two girders are added, using 2" x 7" channel irons, each 57" long (2). These may be taken from a Ford Model T frame. Pieces are cut out 25" from the forward end of the girders so the front can be tilted up about 4". Bracing to the blade is done with two 15" angle irons welded at both ends (3). Further bracing (4) is added as shown in Fig. 4. Note that braces welded to the blade do not pass through the girders.

The bulldozer pivots on a 24" shaft (5), which passes through the girders and through 2" x 9" x 18" channel irons (6). These channel irons are secured to the tractor with four bolts each, and are braced forward by two 3/8" x 1 1/2" x 14" flat irons (7) bolted to the tractor and welded to the channel irons. For bracing to the rear, the channel irons have two 3/8" x 3" x 44" irons (8), bolted to the tractor's drawbar and welded to the channel irons.

Assembly at the top of the blade begins with two welded 3/8" x 2" x 5" brackets (9) to be coupled with the connecting rods (10) on the lifting gear. One connecting rod is made of 3/8" x 2" x 12" flat iron, with holes drilled at the ends. This is bolted to the bracket (9) and the rocker arm (11). To this are welded two flat irons, one sandwiching the lifting arm (11) and the other enclosing the bracket (9), as in Fig. 2.

The other connecting rod is adjustable. It consists of two 3/8" x 2" x 5" and two 3/8" x 2" x 3" flat irons, with a 3/4" bolt, 6" long, and a 3/4" hex nut—Fig. 2. The two shorter



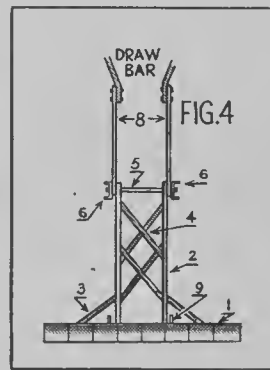
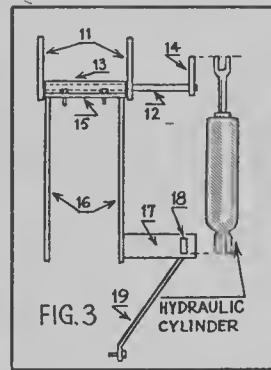
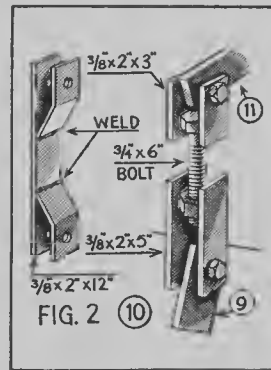
irons are welded to the head of the bolt, and are drilled for bolting to the lifting rocker arm (11). The longer irons are welded to the hex nut and coupled with the blade bracket (9).

The lifting assembly—Fig. 3—begins with the two lifting rocker arms (11), each made of 3/4" x 3" x 14" flat irons. These are welded securely to the 1 1/2" rocker shaft (12). Welded between the two arms is a 14" length of heavy pipe to act as a rocker shaft housing (13). At 10" out from the right arm, a 3/4" x 3" x 13" arm (14) is welded for coupling with the hydraulic cylinder, and it is set back about 60° from the other arms.

To the pipe (13) is welded a 3/8" x 4" x 13" flat iron (15) for bolting to

the tractor. Further fastening is done with two 3/8" x 3" x 28" flat irons (16), each welded to the pipe at the front and bolted to the tractor. Then a 4" x 4" x 12" angle iron (17) is welded to the flat iron about 24" back from the rocker shaft (12), depending on the length of the hydraulic cylinder. Welded vertically onto the angle iron is 3/4" x 3" x 5" iron (18) for coupling with the cylinder. Lastly, a brace (19) is welded to the angle iron and bolted to the tractor.

For a finishing touch, a worn-out grader blade can be bolted to the bottom of the dozer blade. This is not strictly necessary, but it will enable the bulldozer to scrape more cleanly, and it uses a little less power.



## Care of Water Softener

HERE are six tips for getting the best service from a water softener:

1. Use only the type, or size, and amount of salt recommended by the manufacturer. This varies with make, model and design.
2. Keep operating instructions handy and follow them closely.
3. Keep salt clean to avoid contamination of the softening mineral or synthetic resin.
4. Observe the recommended times and flow rates for backwash, regeneration and rinse cycles.
5. Re-schedule regeneration time if the quantity of water used is

changed by appliance, visitors, or an increase in the family.

6. Observe water use and schedule the regeneration a short period before exhaustion of the softening power. This lengthens the life of the softening mineral and increases the efficiency of the softener.

## Change in Combine Own

A SMALL but significant change in combine ownership is reported in some Manitoba, especially in the area and the south-central along the international. A number of farmers were

(Please turn to page 56)

for crop spraying  
weed and insect control

for dozens of  
farm uses

**TRACTOR MOUNTING**  
**Hypro PUMPS**

5 sizes  
5 to 80 GPM  
pressures to 350 lbs.

from \$35<sup>00</sup> to \$94<sup>50</sup>

When your sprayer pump needs replacement, choose America's most dependable...an efficient, long-lasting HYPRO pump.

Many farmers keep a spare.

Hypro Roller Pumps with either nylon or buna-N (rubber) rollers outlast all others in agricultural use, handle water, oil, even suspensions of wettable powders. write for a catalog today.

**JOHN BROOKS & COMPANY LTD.**  
6525 Somerled Ave., Montreal 29, Que.

Please send me a catalog of pumps for farm use.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

# NEW OLIVER 1900

...pulls biggest tools...  
cuts per-acre farming costs



The Oliver 1900 pulling 20 feet of chisel plow. Imagine the work you'll do per day with this team—at a new low per-acre fuel cost! The Oliver 500 Series chisel is available in sizes from 4 to 28 feet.

The mightiest general-purpose farm tractor built today—that's the new Oliver 1900. Here's power as you like it—with unexcelled horsepower and well-balanced weight to match. This is tractor power for now and for the years ahead—power for your biggest implements and toughest jobs.

The 1900's power source? A 94-horsepower, 4-cylinder, 2-cycle GM diesel—built to save fuel and save on maintenance. This engine has been known to clock 8000 hours between overhauls—that's like money in your pocket.

So many work-boosters in this 1900, such as: "Hydra-lectric" for push-button depth control... 540 (or 1000) and engine r.p.m. PTO... front axle which oscillates 16 inches for extra field flexibility... wide-swinging roller drawbar... fully enclosed platform.

This is the power you've got to try. Arrange with your dealer for a proof-test soon. OLIVER CORPORATION, REGINA, SASKATCHEWAN

Now! Earn 6% on cash or trade

SEE YOUR  
**OLIVER**  
DEALER

Turn to your dependable Oliver dealer when you need hurry-up service and genuine Oliver spare parts.

DISTRIBUTORS: Montreal, Quebec, La Coopérative Fédérée de Québec; Toronto, Ontario, Goodison Industries, Ltd.; Truro, Nova Scotia, Atlantic Equipment, Ltd.; Vancouver, B.C., Pacific Tractor and Equipment, Ltd.

*Team an  
OLIVER Wheatland  
with these  
expandable tools*

**New Semi-Mounted No. 5760 8-Bottom Plow**—An unbeatable team for capacity and economy. Tested and proved—In tough silt loam soil, in one hour, the 1900 and the 5760 plowed 4.03 acres at 19¢-per-acre diesel fuel cost.



**24-Foot Dual-Disc Harrow**—Utilize 1900 power fully with this dual setup. Sizes range from 17 feet 4 inches to more than 24 feet in width. You do the work of two units with this one unit, one operator.

**New 77 horsepower 1800 Wheatland**—Here's the powerful Oliver 1800 Wheatland. This tractor recently set a new fuel economy record in a nationally recognized tractor test.





new rented machines or were watching custom combining outfits from the U.S.A. thresh their crop last year.

At least one Brandon farm machinery dealer is renting new and good used combines, at \$2 per acre

for new machines, to farmers harvesting 500 acres of crop or more, according to the Manitoba Department of Agriculture. Farmers with more than 800 acres of crop may obtain 2 combines. In a number of cases where one individual has less

than the minimum acreage, a deal is made with a neighbor to rent a combine jointly.

Although combines are rented with an option-to-buy clause in the agreement—90 per cent of rental is credited toward the purchase price

of the machine—most farmers appear satisfied to rent each fall. As one farmer explains it: "If I want to rent extra land for a year or 2 years, I don't have to tie up capital in an extra combine for such a short period."

Along the international border, a growing number of grain producers take advantage of custom combining outfits from North and South Dakota, and even from Kansas, as they travel from mid-summer to late fall, following the progressively ripening grain. Charges are \$3 to \$4 per acre, with the higher fee including hauling and fuel costs. It is reported that a number of farmers have sold their self-propelled combines or have simply left them in the shed.

Other Manitoba farmers are switching from self-propelled to pull-type combines, the latter costing as much as \$5,500 less. This trend is expected to continue. Agricultural engineers of the Manitoba Department of Agriculture estimate that the cost of owning and operating an \$8,000 self-propelled combine, excluding repairs, is \$1,000 annually.

# Concrete

MADE WITH CANADA CEMENT

for lighter chores  
healthy herds

Less work at feeding time with a modern cast-in-place concrete silo like this, on the farm of Mr. Harold Row, Belmont, Ont.

Concrete gutters and floors promote sanitation, speed clean-up in this dairy barn.

Concrete yard... keeps stock cleaner and reduces mud-borne diseases.



Ask for these Two High Quality Products for all your concrete work. Available at your building materials supplier.



## SEND FOR FREE BOOK

116 pages of ideas, pictures, instructions.



CANADA CEMENT COMPANY, LIMITED  
Canada Cement Building, Montreal, P.Q. C-3

Please send free book, "Concrete on the Farm"

NAME.....

ADDRESS.....

CITY..... PROV.....

## Self-Feeder



[J. J. McConnell photo]

FARMERS discuss a self-feeder designed to be used with an automatic feed mixer and grinder for hogs. It was shown during a materials handling field day at Borden, Sask.

## Diesel, Gas Or Propane Tractor?

OF the three main types of tractors available, the diesel tractor supplies the cheapest power at present fuel prices and with 500 hours or more of annual use. J. L. Thompson of the Swift Current Experimental Farm, continues the comparison by saying that with propane at 17 cents per gallon, the gasoline tractor has a slight advantage at 500 hours. But propane is favored slightly at 1,000 hours of use. If propane is used on the farm for cooking, and can be less than 17 cents a gallon, the tractor is worth considering.

Cost of power is such in the farm operation, to think carefully before buying a tractor. Apart from cost, type of tractor, it is important to select the size of tractor to the needs of your particular



## FARM MECHANICS

## Don't Let Gasoline Escape

EVERYBODY knows that gasoline evaporates from storage tanks and barrels, but there may be some doubt about the seriousness of it. An oil company had agricultural engineers set up a test at Regina, using four 300-gallon storage tanks to copy storage conditions found on farms. One tank was unpainted, the second was covered with aluminum paint, the third was painted with aluminum and shaded by a plywood canopy, and the fourth was painted with aluminum and fitted with a pressure vacuum relief valve. The first three tanks had ordinary fill and vent caps. The engineers withdrew 45 gallons of gasoline from each tank at prescribed intervals to simulate farm conditions. The average losses from the tanks were as follows:

1. Unpainted tank—6.2 per cent loss.
2. Painted tank without roof—5.6 per cent.
3. Painted tank with roof—3.3 per cent.
4. Painted tank with pressure vacuum relief valve—1.4 per cent.

Apart from the loss of so many gallons of gasoline, there can be a loss of octane rating and a possibility of using fuel which provides hard starting, poor idling and accelera-

tion. It may even cause knocking or pinging.

It is quite common knowledge that evaporation can be retarded by painting overhead storage tanks white or aluminum. But very few farmers invest in a canopy or a good pressure vacuum relief valve. These valves are designed to seal the tank under slight pressure as the gasoline temperature increases. They also have release valves to bleed air into the tank when gasoline is drawn off, or when the tank cools at night.

Remember that evaporation takes place in winter as well as summer. Refineries increase the volatility of their gasolines for easier starting in cold weather, and this volatility has a marked effect on the rate of evaporation.

As for storage in 45-gallon drums—don't do it, says K. W. Dormier of the University of Manitoba. In addition to high evaporation losses, drums are inefficient and are easily contaminated.

### Use Thermostat

REMOVING the thermostat from an engine to "correct" overheating of the cooling system can greatly increase fuel consumption, reduce power, and contribute to spark plug fouling through accumulation of excessive carbon on the insulators. The thermostat is essential to proper cooling and engine operation. It should never be removed and the engine allowed to run without it. ✓

## FARM BUILDINGS

### Handy Mineral Feeder

THIS all-weather supplement feeder on the Colpitts dairy farm near Calgary was made from two 45-gallon drums. An end was cut from each and the drums were welded together at the openings. Cuts were then made in the side of the double drum and the metal was rolled back

of them in his operations to hold salt, bone meal, limestone and mineral supplements.—G.McC. ✓

### Open Front Has Disadvantages

THE open-front hog building, which enjoyed sudden popularity as a cost and labor saver in Ontario, has not lived up to all expectations. H. E. Bellman, agricultural engineer in Bruce County, says a lot of farmers had trouble with snow blowing in and plugging up the outside yard. Poorer feed conversion has shown up, too.

According to Bellman, U.S. research demonstrates that the most efficient production in hogs is obtained when the temperature is between 45° and 60°. This is proof that some investment is needed in an enclosed barn.

Speaking of feed costs, Bellman points out that these run to about 70 per cent of the cost of growing and finishing hogs. Building and labor costs are less than 15 per cent. It makes sense to spend a little extra on a building and pay for it in better feed conversion. This advantage should continue even if pigs endure severe winter for only 3 months. ✓



to form a lid or roof for the feeder. This is held in place by two angle irons bolted to a two-by-four.

Ralph Colpitts, who developed this feeder, is now using 10 or 12

## SAVE STRAW — CHAFF — FEED While Combining



Why pay twice as much when you can do MORE harvesting with half the investment with a Claas?

**ATTENTION LIVESTOCK FARMER:**

The Claas Super 500 is the only combine with built-in straw and chaff baler, if feed is needed, straw cutter is also available. Can you still afford to use your threshing machine?

## THE CLAAS SUPER 500 COMBINE — Biggest inside capacity combine available in Canada

Years of Western Canadian selling and field experience have proven that the largest inside capacity and straw saving features put the Claas Super 500 in a special category among other combines in the field.

- New high capacity straw and chaff baler—quality feed while combining.
- 50" wide cylinder—puts through more grain in less time.
- 50" wide by 11' shaker—handles more grain with less loss.
- Threshes 16' swath with ease—no crop too heavy for this combine.
- Low in purchase price—high in performance.

**When harvesting your next crop — BE MODERN — BE ECONOMICAL — BE SAFE**  
**The sure way is the Claas way**

Due to the tremendous demand for Claas Super 500 combines, distributors will be appointed shortly in Saskatchewan and Manitoba. Write today for their addresses.

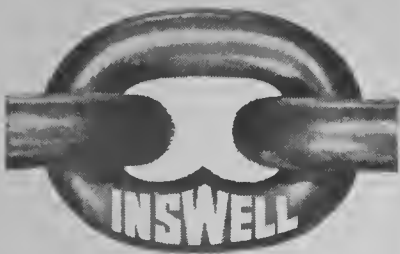
WRITE  
for more  
information  
to:

**ALBERTA ENGINEERING LIMITED**

WETASKIWIN Box 789 ALBERTA

Manufacturers and distributors of world famous farm machinery

CM CHAIN Makes Farming Easier



Electric Welded Chain

... the superior chain with the distinctive weld

PROOF COIL • BBB • HIGH TEST

Log and load binder chains are now available also in the exclusive Inswell HERC-ALLOY grade with a tensile strength of 125,000 lbs. per sq. in.

Genuine Inswell COSTS NO MORE



CM DIFFERENTIAL HOISTS Capacities from 1/4 to 1 1/2 tons.

CLAW and DREADNAUGHT passenger car and truck tire chains. Farm tractor tire chains.

Made in Canada by Columbus McKinnon Limited



(Formerly McKinnon Columbus Chain Limited)

St. Catharines, Ontario

Sold by dealers across Canada

Don't hesitate to ask an advertiser for additional information if you need it.

**HAWK BILT**  
**AIR DRIVE**  
**FOR HAMMERMILLS**

Handles Tough Jobs where Belt Drives Fail!

No slipping; no greasing; heavy duty; easy to install; field tested!

**FREE FOLDER and PRICES**

**HAWK BILT**  
MFG. CORP. • VINTON, IOWA

## MEN PAST 40

Afflicted With Bladder Trouble, Pains in Back, Hips, Legs, Nervousness, Tiredness.

If you have these troubles, particularly bladder trouble, then your condition may be traced to Glandular Inflammation... a constitutional disease. Medicines that give temporary relief will not remove the cause of your trouble. Neglect of Glandular Inflammation often leads to premature old age and sometimes incurable malignancy.

The past few years men from over 1,000 communities have been successfully NON-SURGICALLY treated here at Excelsior Springs for Glandular Inflammation. They have found soothing relief and a new outlook in the future of life.

The Excelsior Medical Clinic, an institution devoted exclusively to the treatment of diseases peculiar to older men, has a NEW FREE BOOK that tells how Glandular Inflammation may be corrected by Proven NON-SURGICAL treatments. This FREE BOOK may prove of utmost importance in your life. Write today. EXCELSIOR MEDICAL CLINIC, Dept. B8740, Excelsior Springs, Mo.



## CONVERT YOUR TRACTOR TO HYDRAULICS IN 10\* MINUTES

WITH THE HI-LO-PAC you can have Hydraulic Power for any tractor regardless of Age—Model or Make. That's right, in just 10 minutes you can double your tractor's usefulness. Here is everything in 1 package needed to operate all farm implements. Just hook it on, fill the reservoir and your "Extra Hand" is ready to go to work. No pulleys—chains—sprockets. Mounts directly to P.T.O. shaft. Operates at LOW P.T.O. speeds.

with the Char-Lynn

**Hi-Lo-Pac**

"Available at Leading Implement Dealers Throughout Canada"

\*After Initial 10 Minute Installation—On or Off in 3 minutes.

● CONVERT YOUR OLD OR NEW TRACTOR TODAY

● LIBERAL TRADE-IN ALLOWANCE ON USED HI-LO-PACS

● 250,000 NOW IN USE

—Fill in coupon for detailed information—

Tractor Make \_\_\_\_\_

Model \_\_\_\_\_ Year \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

**CHAR-LYNN CO.**  
2843 26th Avenue South  
Minneapolis, Minnesota CG-2



## Here's a Permanent Potato Storage

This grower backed his faith in farming with hard cash last summer

WHEN Carr Souter's old potato storage house leaked water during the heavy rains of 1959-60, costing him dearly in spoiled potatoes, he faced a big decision—the need to invest in a new storage building, or to let his farm program go by default. For Souter believes it is just as important to find a good market for a crop, as it is to do a good job of growing the crop. He packs his potatoes the year round right on the farm in 10 or 50 lb. bags for sale to a local wholesaler. This means he must have good storage. He decided to remodel his old building from the ground up.

He replaced wooden sleepers on the floor with concrete ones, rotting cedar posts with concrete block posts, and even bought rot-resistant fir beams from British Columbia to make his new storage permanent. His new building, set into a side hill on Carr's northern Ontario farm near Powassan, is one of the finest we have seen. It measures 24' by 70' and has a capacity for 6,000 bags. It leaves him committed to potato growing for years into the future, too.

Souter isn't a bit fearful of the prospect. "Potato growing isn't a bad business on this sandy farm," he says. Glancing at son Ken, who has shown a lot of interest in the farm too, he adds, "I think this farm will stay in the family for at least one more generation."

Souter's old potato storage was divided into a series of bins but his new one hasn't a single partition. The floor consists of slatted wooden sections which are laid on the concrete sleepers to allow plenty of ventilation. Also, they can be easily removed for cleaning in summer. Slatted panels set away from the walls allow for ventilation around the sides too. Wooden beams in the storage are wrapped in plastic to protect them from the dampness.

The roothouse is set into a side hill, and banked to the top with



Ken Souter shows ceiling insulation beneath floor of the overhead barn.

earth. An overhead barn serves as a machine shed, so the shed floor becomes the storage house ceiling. This is heavily insulated. Below the plank flooring are 6 inches of loose insulation, a layer of insulboard, and then plastic sheeting. During harvest, potatoes are dumped through trap doors in the shed floor into the storage.—D.R.B. V

## Paint That "Breathes"

WHEN exterior paint peels or blisters, the cause is usually the pressure of inside moisture on an impermeable paint layer. Prof. H. M. Lapp of the University of Manitoba says vapor barriers on interior wall surfaces resist the passage of water vapor and protect outside paint against peeling. However, it is possible to get paints which "breathe"—they are impermeable to water, but let vapor pass through.

Professor Lapp reports that a latex paint marketed by several major paint companies has this "breathing" property. The qualities claimed for it include passage of water vapor without blistering; durability; reduced application time; rapid drying; uniform color; washable surface; application by spraying or brushing either to moist or dry surfaces. Water is used as a thinning agent, and soap and water will clean equipment and brushes.

These advantages are worth considering when selecting paint for a new building or for routine maintenance and renovation. V

## Fire Control

A DRY fire extinguisher with a 5 lb. charge is adequate for most farms, according to Hal Wright of the Ontario Department of Agriculture. He points out that this unit can handle fires when the fire is small—it's the first two minutes, most important in putting out a fire. One of these extinguishers costs about \$30 to \$35. Don't check the extinguisher at least once a year to be sure it's fully charged.



Carr Souter shows how slatted floor sections fit onto concrete sleepers.

# GMC FARM FAVORITES FROM... DAWN TILL DUSK



## DAY AND NIGHT—FOR BUSINESS OR PLEASURE GMC'S PROVE THEIR ABILITY TO WORK HARDER, LONGER

These versatile GMC farm trucks are favorites around the clock. Designed for hard work and long hours—they're also handsome and roomy, trucks you'll be proud to own. New stamina and performance, more efficiency, profit-building economy and dependability you can count on when the going gets rough—these worth-while advantages are built right into the heart of every new GMC truck for '61. See how you can benefit from GMC's new Truck Triumph of the 60's—at your GMC dealer's, today.



A GENERAL MOTORS VALUE

## THE TRUCK TRIUMPH OF THE SIXTIES



# Do you need a NEW TRACTOR?



If you need a new tractor on your farm, but haven't the ready cash to buy one...FIL may be the answer to your need.

A B of M Farm Improvement Loan can put you at the wheel of the latest model very quickly. And there's nothing that saves money, time and work on a farm quite so much as a modern tractor.

If your proposition is sound, you can get a B of M Farm Improvement Loan for any type of equipment you need on your farm. Why not talk to your nearest B of M manager? He'll gladly show you how a Farm Improvement Loan can help you in your operations ...and how little it costs.

**MY BANK**  
TO 2 MILLION CANADIANS

**B of M**

FIL the fixer...

his full name is Farm Improvement Loan. Give him a chance to help fix up your farm... he's economical, convenient, versatile. He can do almost anything in making your farm a better farm.

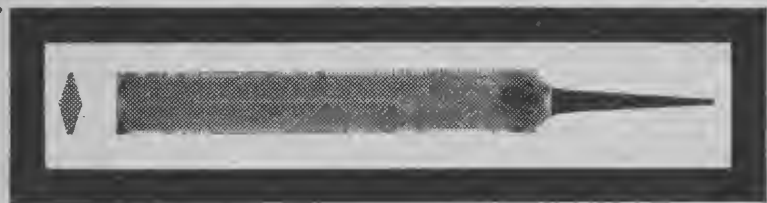


**BANK OF MONTREAL**

*Canada's First Bank*

WORKING WITH CANADIANS IN EVERY WALK OF LIFE SINCE 1817  
D2019

*When Writing to Advertisers Please Mention The Guide*

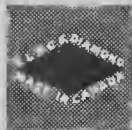


## GET THE RIGHT FILE FOR EACH WOOD TOOL

Each of your woodcutting tools can have a factory-fresh cutting edge—if you use the Black Diamond file made just for it.

The Black Diamond Web Saw file, for example, will smooth away dull edges and nicks on your web or pulpwood saw like no other type. The velvet smooth Black Diamond Double Cut Smoother Cutting Chain Saw file—with the orange tang—can dress up your chain on the job.

Get top production and smooth, easy cutting from your wood tools. Get the right file—with the Black Diamond trade mark.

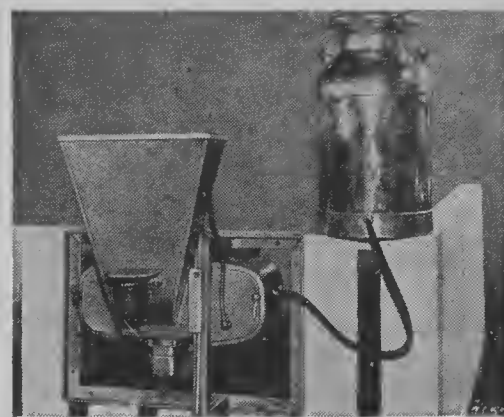


**NICHOLSON FILE COMPANY OF CANADA LTD.** PORT HOPE, ONTARIO  
MANUFACTURERS OF BLACK DIAMOND FILES FOR OVER 50 YEARS



## Calf Feeder

This equipment dispenses milk replacer or fluid milk automatically to calves. It is installed on the pen fence, connected to water and electricity, and is ready to handle up to 15 calves. Features are easy cleaning and filling, vibrator, timer, and nipple dispenser. (K&K Manufacturing Inc.) (319) ✓



## Handy Boxes

For storing nuts, bolts, and other maintenance supplies, these boxes can be used singly or stacked as shown. They are molded in plastic, with inside measurements of 3½" long by 3" wide by 1¾" deep. (Container Development Corporation) (320) ✓



## Nursery Pen

This pen can be used for farrowing pigs, confining lambing ewes, or as an individual calf pen. Steel legs are angled away from pen so pigs can't be crushed against them, and the same applies to the slanted feed-water unit. Height of mesh panels from floor is adjustable. (Walsh Manufacturing Co.) (321) ✓



## Fork Lift

The No. 10 orchard fork lift is for handling vegetables and fruit in bulk, using every known type and size of container. Forks are 48" long and 5" wide, and adjust to maximum width of 36¾" and minimum of 15½". Hydraulic hold-down has 38" stroke, so grower can stack 11 empty boxes or 7 loaded boxes high. (Massey-Ferguson Ltd.) (322) ✓

For further information about any item mentioned in "What's New," WHAT'S NEW Department, The Country Guide, 1760 Ellice Ave., 21, Man., giving the key number shown at the end of each item,

Then, in the final game, when each was tied for first place, Alberta met Manitoba. Alec still had no use for the swaggering foursome with their mountain-climbing hats. He was thankful there was a referee to check the slide limit or the young showoffs would be riding their rocks to the button.

LIGHTS gleamed down on the ice, its colored circles frosty with new pebble. Around the boards hung the banners of the ten provinces. A capacity crowd filled the Corral to see the finale of Canada's highest curling contest. The girls were leaning over the front boards. Their lips bright, their jaws working rhythmically as they chewed gum and watched, they reminded Alec of modern Loreleis—Loreleis in reverse, wooing the boys away from the rocks.

The team shook hands and tossed a coin for the first rock. Alec Munro looked small, almost too light for the weight of his heavy sweater, wool tartan scarf, tam, gloves and black felt boots and rubbers. Beside him, the young skip of the opposing rink, hat pushed back on his head, sweater open, sleeves rolled up, hands ungloved, and one rubber on his lightly shot feet seemed to be dressed for a game of a different season.

Alec Munro won the toss and the first end with a beautiful last-rock draw. The game was on.

By the end of the tenth the game was tied, five-all, and the boys were getting equal applause from the spectators. Not one foot had come within a yard of the restraining limit of the hogline. Beautiful draws and cracking knockouts rolled equally easily down the ice from the bare hands of the young curlers.

On the eleventh end, when the Manitoba skip went down to shoot, the front of the house was rimmed with the white handles of the opposition. He played a beautiful draw through a narrow port and lay shot.

Alec Munro was dead on the broom as he went through the same port to remove the young skip's rock.

A swell of admiration rippled through the crowd.

"The kid's got to do it again, then leave his rock over a bit or Munro can knock it out and count four with his last rock."

The rock looked slow at the start. "Sweep!" called the young skip, following it down the ice. "Sweep it hard!"

BENT almost double over their brooms, the boys swept their skipper's rock through the narrow port and up to the rock to nudge

it enough to lie shot and leave a touchy knockout for Alec's last play.

"Beautiful shot, kid!" The applause of the crowd was unanimous.

"Nice currlin' lad," Alec said as he passed him mid-ice.

Alec bent low over the hack and cleaned his rock against the flat thickness of his broom. Easing his wiry old back into a well-practiced crouch delivery, he started the white-handled stone down the center, heading for the port. The ice beneath it rumbled in a subterranean roar. For a moment it appeared to be on the guard but just before it reached the port it fell back, cleared the guard and moved slowly to kiss the shot rock. But the kiss was not quite hard enough. Manitoba was half an inch closer to the button. The girls clapped, and the game went into the twelfth with the score six to five, in favor of Manitoba.

Alec was really enjoying the game now. In spite of himself, an admiration for the young curlers began to creep through him. The close competition was a stimulus he hadn't felt in years. Ian, on the other hand, was strangely quiet. He took his grandfather's called shots without comment and held himself aloof from the rest of the curlers. Halfway through the twelfth, Alec noticed the lad staring at the little blonde who was talking to the girl next to her.

"I think he's awfully cute," she said, looking at no boy in particular.

"They're both cute," the other girl agreed, "but the slide makes the difference. It's so graceful."

At this point, Manitoba had two rocks in the house; one, a biter on the left outside ring, the other to the right front on the eight-foot circle. Alec lay shot with a rock behind Manitoba's. Manitoba's third was narrow with his first rock and Alec swept it through the house. Ian played to come up to the opposition's front rock, nudge it out and guard their own. He was on the broom, but with too much weight. He knocked the rock out, but rolled too far to the left and lay guarded by Manitoba's biter.

The Manitoba third then played an easy takeout with his second rock. The girls gasped, "What a beauty!" and a sigh rippled down their ranks.

ALEC saw Ian hesitate on his way to shoot his last rock, and look back at the little blonde as she leaned over the playing circle. There was something different about the boy's walk as he neared the hack.

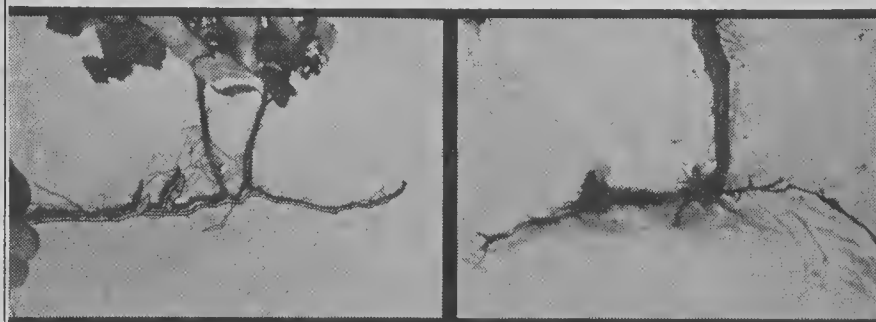
He could hardly believe it when he saw his grandson remove one of his rubbers and crouch into the hack, his back slightly more upright than usual. "Not so heavy, this time, lad," Alec called, "otherwise the same as before." There was something about the boy down at the other end of the rink—surely he wouldn't . . . !

But he did. Swinging the heavy stone up behind him, Ian came through on a lovely curve that carried him just to the hogline before he released his last rock. It was a magnificent slide. The girls squealed. The boys on the opposing team looked surprised for a few seconds, then followed the rock, waiting for instructions from their skip. There

# get at the root of your Canada Thistle problem with

## 'TROPOTOX' TRADEMARK SOLUTION OF MCPB/MCPA SODIUM SALT BRAND PLUS

'TROPOTOX' PLUS gets at the root of your weed problem. In fact, killing action starts with the root that is why you get positive weed kill even with persistent perennials in your grain, flax and clover.



UNSPRAYED  
CANADA THISTLE ROOT  
Note new bud growth on the root.

'TROPOTOX' PLUS  
SPRAYED CANADA THISTLE ROOT  
Note the lateral root kill and bud abortion.

### CANADA THISTLE

'TROPOTOX' PLUS works through the root of the Canada Thistle plant where it disrupts the lateral root structure. Therefore, giving more permanent kill than obtained with other weed killers. Note the two photographs, one of an unsprayed plant and a 'TROPOTOX' PLUS sprayed plant.

### HERE'S PROOF

Mel Greenaway used 'TROPOTOX' PLUS last year on his 1,200 acre farm. Mel states that he got to the root of his Canada Thistle problem with one application of 'TROPOTOX' PLUS in his field of flax. Mel thoroughly believes that 'TROPOTOX' PLUS is the answer to the effective control of Canada Thistle.



Literature and Information available from

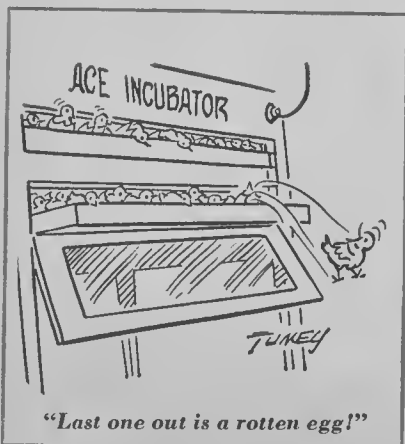
**MAY & BAKER (CANADA) LIMITED**  
180 Bellarmin Street, Montreal 11, P.Q.

Manufactured by May & Baker Ltd., Dagenham, England.

Coast to Coast distributors of 'TROPOTOX' PLUS

Niagara Brand Chemicals, Burlington, Ont. & Regina; A. H. Howard Chemical Co., Orangeville, Ont.; M. J. Smith (Chatham) Ltd., Chatham, Ont.; National Grain Co. Ltd., Winnipeg, Edmonton, Calgary, Saskatoon; Oliver Chemical Co. Ltd., Lethbridge, Calgary, Alta.; British/American Chemical Co., Vancouver; Ansell Chemical Co. Ltd., Vernon, B.C.; Coöperative Fédérée, Montreal; E. D. Reid Produce Ltd., Charlottetown, P.E.I.; Gardener Sales Ltd., Winnipeg; McCain Produce Ltd., Florenceville, N.B.; Scotian Gold, Kentville, N.S.

**M & B**



### Now You Can Order

## LYON AUTOMATIC FIRE EXTINGUISHERS

Direct from the Factory

• Stop wood, electrical and gasoline fires. • Are quick and simple enough for a child to use. • Are always ready for instant use without servicing. • Do not freeze, corrode nor deteriorate.

Order these trusted guardians of thousands of farm homes and buildings direct from factory. Complete with rack and glass extinguishing bulbs.

PRICE PER DOZ. \$50.00

LESS THAN DOZ. 5.00 EACH

Extinguisher bulbs only—

PRICE PER DOZ. \$30.00

LESS THAN DOZ. 3.00 EACH

DELIVERED BY EXPRESS PREPAID

**LYON FIRE EXTINGUISHER CO.**

527 Gertrude Ave., Winnipeg



were no instructions. It was a perfect knockout.

ALEC made no comment. With his broom held horizontally behind him, he watched his grandson's journey back up the ice. Instead of replacing his rubber, Ian took the slide-step, sliding-step glide of the one-rubber curlers, and joined his grandfather at the T. Alec pretended not to notice his grandson's triumphant stance. Stolidly he watched the Manitoba skip play a knockout roll to freeze to Ian's first rock and lie shot.

Ian tucked his broom under his arm and moved closer to his grandfather. The moment was tense. They had to make two to win. If Alec could hit the other skip's rock without losing his own, and spread his two so that Manitoba could get only

one with their last rock, he had a chance to score two and eliminate an extra end.

Alec said nothing. Placing his broom against the front-ring biter, he indicated the play he wanted. He wasted no time on his trip down the ice. With quick delivery he made a perfect chip shot off the biter and easily disposed of his opponent's rocks to lie two himself.

The crowd began to murmur.

"Almost impossible for the kid to get them both."

"Almost, but not quite. The right shot on an inside angle can sell them both and Munro'll have to draw to tie the game."

The young skip started down the ice slowly, a lingering slide on his rubberless shoe, a short step on the other. Occasionally, he bent over and flicked at imaginary straws with his broom as he gave the appearance of nonchalance. The large arena was very still. The other provincial teams had all finished their games and were huddled in groups, watching. Suddenly a girl's voice was heard, carrying the length of the ice, "I like the other one's slide better."

The young skip seemed to hesitate. Then he swaggered slightly as he continued down the ice to the hack. For a long time he cleaned off his rock, rubbing hard at the granite with his broom. Gracefully holding his broom out at an arm's length right angle to his young body, he brought the rock back in a wide arc behind him and then gently forward and out in front in a beautifully executed slide that carried him in a flow of movement far beyond the hogline. The other members of his rink stood transfixed on the ice, brooms poised and forgotten, as they stared unhappily at their recumbent skip. No sound except its own accompanied the unswept rock as it slid to accomplish its mission, the called shot that was almost impossible.

As if he was in a trance, the young skip stood up. Moving quickly he followed the path of his rock down the ice to hold out his hand to Alec.

"Congratulations, Mr. Munro," he said. He moved to shake hands all round.

Alec Munro ignored the proffered hand. "The game is no over."

"The game is over, Mr. Munro!" The young skip's voice was firm. "My last rock was disqualified."

"Nobody said so—an' I'll not call the umpire."

"We all say so." The three boys came up behind their skip, hands outstretched.

"Och, I dinna like the idea o' a win on a technicality—especially when yon rock was so beautifully played."

"How do you think we'd feel then, if we took it on such a technicality? This is the Macdonald Brier, Mr. Munro." The boy seemed to stand taller as he spoke. "Curling is a game that's strong on ethics and this one was lost by a disqualified slide."

Alec winked at Ian then, and accepted the young skip's hand. "I'd say it was lost, like the first game of all, by the words o' a young woman."



*"On the farm, time rings the changes daily and every season is a growing season... the ripe seed quickens in the fertile earth; the young stock thrives and fattens, the children grow mature in mind and body, healthily and in step with nature..."*

## SOON HE'LL BE ON HIS OWN...



For valuable guidance ask for a copy of "Financial Training for Your Son and Daughter" at your local "Royal" branch.

As your boy's interest in farming develops, encourage him to see the picture as a whole... to recognize that successful farming includes keeping records, balancing books... saving.

Now is a good time to introduce him to your Royal Bank manager, who can help him learn to handle his own affairs. He'll be happier with his own personal budget... his own savings account to build.

You'll enjoy watching them grow together.

**THE ROYAL BANK OF CANADA**



# Home and Family

The Country Guide's magazine for rural women

## Winter Streams

*Now the little rivers go  
Muffled safely under snow,  
And the winding meadow streams  
Murmur in their wintry dreams,  
While a tinkling music wells  
Faintly from their icy bells,  
Telling how their hearts are bold  
Though the very sun be cold.  
Ah, but wait until the rain  
Comes a-sighing once again,  
Sweeping softly from the Sound  
Over ridge and meadow ground!  
Then the little streams will hear  
April calling far and near,—  
Slip their snowy bands and run  
Sparkling in the welcome sun.*

—BLISS CARMAN

["Winter Streams"  
courtesy McClelland and Stewart Limited



[Miller Services photo

## February Fancy

**W**INTER is still very close to us in February. Sometimes sharp winds swirl snow into rippled drifts across fields and roads. Sometimes they coat trees and shrubs with icy frosting. Yet February frequently has a gentle look. You may see this gentleness in stretches of snow that lie undisturbed across fields and meadows, or in coated branches glistening in the glare of winter sunlight. There's cold gentleness in the calm of frosty mornings when smoke plumes rise hesitantly upward. Whatever its quality there's still time for us to enjoy the stimulation of our favorite winter sports.

For our recreational needs we don't need expensive equipment or buildings. For example, there's pleasure to be found at the nearest creek or pond irrespective of season. In winter, snow pushed aside, their frozen surfaces become favorite playgrounds for skaters of all ages. In spring and summer these same creeks and ponds offer their own seasonal delights.

And what is recreation but the enjoyment of those things we choose to do in our leisure time which stimulate our minds and bodies and refresh our spirits? It's wholesome activity that offers a complete change from the daily routine in our homes. Sometimes it may be shared; but it can be enjoyed alone.

I've met people who need to release their pent-up energies in such sports as skating and curling. I've met those who meet their recreational needs in less vigorous ways. They use paint brush and palette, or whittle a piece of wood. Many of us create with needle and thread. Reading is recreation. So is walking for pleasure. Whatever form it takes, recreation contributes to our physical and mental well-being.

Now, I think I'll take my skates and, with the youngsters, head for the nearest stretch of ice.

V

by ELVA FLETCHER



[R. H. Cooper photo

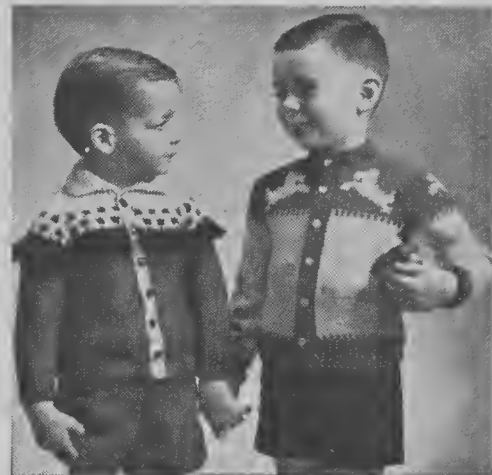
## HANDICRAFTS

### Handknits for Children



A NEW 28-page knitting book, No. 87 in Patons and Baldwins' series, introduces a wide variety in Handknits for Children. The patterns come in sizes 1, 2, 3, and 4. The price of this instruction book is 40¢.

The knitting instructions for this ribbed cap and mitt set for boys are in 2 sizes: Small fits 1 to 2 years, Large fits 3 to 4 years. A girls' set in popcorn stitch is given as well.



The fringed jacket with raglan sleeves is a sweater with a western flavor. It may be knitted in sizes 2 and 4. Boys and girls will enjoy wearing the Scottie cardigan at right. Other boys' sweater designs include snug or V-necked cardigans and cable stitch pullovers.

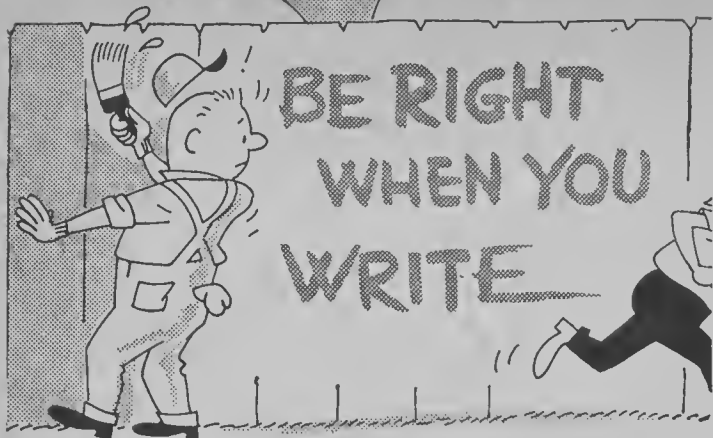


Knitting instructions for this dainty dress and matching cardigan are given in sizes 1 and 2. The set requires six 1-oz. balls. Separately, the dress takes 4 balls, the sweater 3 balls. Other girls' sweater designs include plain, cable, eyelet bolero and Nordic cardigans, varied pullovers.



Popular for its easy fit, a raglan sleeve style is used in pullover and cardigan sweaters. Instructions are given for sizes 1, 2, 3 and 4. The Woollie Winnie knitted doll requires four 2-oz. balls of wool and stuffing material.

For handicraft patterns pictured above please address your order to The Country Guide Needlework Dept., 1760 Ellice Ave., Winnipeg 21, Man.



The addresses on each letter and parcel should show

- the full name of the person who is to get it.
- the correct apartment number, street address, rural route number or post office box number.
- city, town or village, and postal zone number where necessary.
- your name and complete return address in the upper left-hand corner.

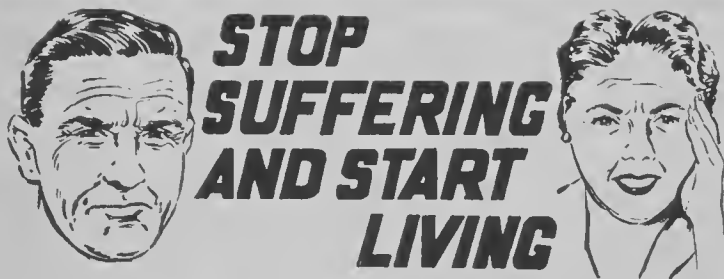
A correct postal address speeds accurate delivery.

PO-60-4B



CANADA POST OFFICE

### FREE BOOK ON FOOD AND HEALTH

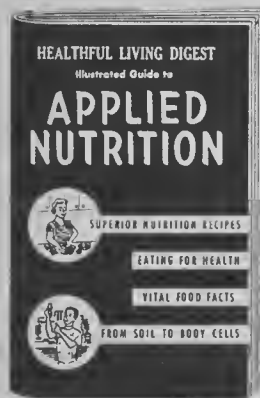


Every family needs this compact treasury of applied Nutrition Knowledge . . . NOW

#### FACTS YOU SHOULD KNOW:

How to Choose the Foods That Build Good Health • How to Prevent "Hidden Hungers" For Vitamins, Minerals and Trace Elements • Reducing Without Starving • Rules for Nutrition-Wise Cooks • Tested Recipes for Superior Nutrition • Avoiding Dangerous Food Habits • What Better Nutrition Does for Your Nerves, Your Heart, Your Skin and Hair • Making Old Age Wait

You will treasure this book for its helpful advice on how to Look Younger, Live Longer and Feel 100% Better.



Offer ends March 31 . . . Get your FREE COPY of this illustrated 132-page Nutrition Guide, which includes Tested Recipes for Superior Nutrition.

#### Good for one "Nutrition Guide" FREE

HEALTH SUPPLY CENTRE, Dept. 9 0  
414 Graham Ave., Winnipeg 1, Man.

This coupon entitles me to one free paperbound copy of "A COMPACT GUIDE TO APPLIED NUTRITION" (132 pages, 49 illustrations) — free of cost or obligation — except for the ten cents enclosed to cover the mailing expense.

NAME (please print) \_\_\_\_\_

ADDRESS \_\_\_\_\_

YOUR COMPACT GUIDE TO HEALTHFUL EATING

by GWEN LESLIE

# Imagine! Apartments In a Schoolhouse

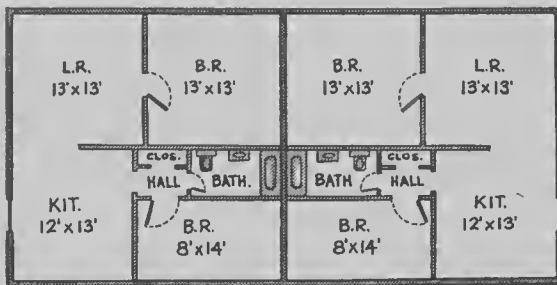


*After building the inverted triangle shelf to top the mahogany paneling Mr. Thompson worked in the warm red-brown stain tone.*



[Guide photos

*The Thompsons changed little on the outside of their stone school while building rooms inside.*



son's idea, the workmanship required to build it was her husband's.

The warm mahogany wood tones are repeated in the kitchen cupboarding and in two valances in the kitchen and living room which serve a dual purpose; they offer cover for curtain rods and also hide the rods which extend along both sides of the building for support.

AS a youngster, Mrs. Thompson's home was a lovely old stone building which had been endowed as a church school 400 years earlier. Her address then was Schoolhouse, School Hill, Cudworth, Yorkshire. This may be one of the reasons for her interest in remodeling the Ontario schoolhouse, but there are others. Mrs. Thompson is interested in Ontario's early history and the relics which remain of it; their farm home is rich in antiques. Her hobbies are creative, and the planning and work of remodeling the old schoolhouse into apartments blended her love for the old with her talents for creating something new.

There's a practical side to the project as well. The Thompsons' son Edward now operates the Thompson family homestead and the three rented farms which make up the 450 acres under cultivation. The Thompson parents plan to retire to one of the apartments. Meanwhile, they will rent them both.

The stone schoolhouse, long a landmark in the Aberfoyle community, remains one. Its belfry marks its early role, and the structure remains as a monument to sound community-building by Canadians of today as well as yesterday. ✓

THE bell no longer summons students to class. Built in 1872, the native-stone schoolhouse at Aberfoyle, Ont., fell victim to progress in 1958. Like so many one-room schools, it was replaced by a more modern multi-room building. Unlike many others, however, it will not stand idle by the side of the road; two of its long-time admirers have given it a new role. Remodeling has turned its spacious 26-foot by 52-foot interior into two apartments.

Mr. and Mrs. E. V. Thompson, who farm in nearby Guelph County, bought the stone schoolhouse in 1959. Mrs. Thompson had admired the school windows for many years. When she saw them boarded over in 1958, she and her husband inquired from the Puslinch School Board whether or not the building was for sale. At first she thought they might take advantage of its location on the busy Hamilton-Guelph highway to make the front part into a shop for Canadian handicrafts, reserving the rear portion for living quarters. Plans to widen the highway ruled out the idea of a shop, since the new construction would run too close to the school building for any parking in front of it.

Instead of a shop, the Thompsons have turned the old stone school into twin apartments, exactly alike. To do this they divided it in two halves, front and back. Each apartment has a kitchen, living room, two bedrooms and a bathroom. The entrance to each comes into the large kitchen which shares a mahogany-paneled wall with the living room. The two rooms are joined by a wide arch. A short corridor leads from the kitchen wall opposite the entrance; one bedroom and the bathroom open off it. The second bedroom opens off the living room.

THE Thompsons were able to restore some of the original maple flooring. The bathrooms and kitchens, and areas which couldn't be renewed, were tiled. But the floor work was a later stage. One of the first improvements that the Thompsons made was to install an oil furnace, so that they could work in comfort through the winter. A partial basement had to be installed to house the furnace and the hot and cold water tanks. Although the pressure seemed adequate, the Thompsons drilled a well to be sure. The excavation revealed that the school's original supports were 18-inch trees, unevenly spaced. The

10-foot square basement, lined with cement blocks, is reached by a door on the outside of the building.

The school building was in good condition when the Thompsons bought it—a fact which they feel made their renovation job relatively easy. However, when the school blackboards were taken down, large holes opened up in the wall. On these walls, as on new walls built to divide apartments into rooms and from one another, they used wallboard. Where it was possible, they preserved the original wainscoting along the outside walls.

The ceiling in the old school house curved up to a center height of 17 feet. The Thompsons lowered the rounded ceiling to a level 10 feet, 8 inches. The new ceiling height was determined by the tops of the windows and the ceiling itself was finished with white ceiling tile. In the living room, the ceiling height was minimized by carrying the ceiling color 30 inches down the wall. An inverted triangle of mahogany tops the paneling and forms a wide top shelf for decorative ornaments. The triangular shelf was Mrs. Thomp-



*Mrs. Thompson chose yellow and white daisies on a brown ground to paper one bedroom wall.*



*Copper hardware on mahogany kitchen cupboards accents a warm beige, brown and orange scheme.*





Michael

*The click of a  
camera shutter records for  
tomorrow the moods and musings of*

## Childhood Days

**Story by  
ELVA FLETCHER**

**Photos by  
MARGARET R. CLEMENTS**



*At this age Michael is a pat-a-cake man. He seems to be saying "please bake me a cookie as fast as you can."*

**M**ORNING always comes early for children, mothers and farmers. They don't need alarm clocks. They know it's time to be up and about when the sun spills its first beams into the night-darkened sky.

Michael's expectant young eyes greet the new day with anticipation. For him yesterday is unimportant; and what is tomorrow? His attention to each of many activities is short-lived but for the duration of each one, he gives it complete concentration.

Michael finds his daily routine interesting and exciting. Like the scientist, he's eager to minutely examine whatever comes into his line of vision. An adventurer, too, he's never so happy as when he's exploring those things that are new and different.

As he grows, he questions most everything, including mother and father. His queries test their talents: What is water? Where did I come from? Who brought me? What is sky? Why is grass green?

Sometimes he airs the boisterous noise of all children; at other times he is introspective, and quietly concerned with those things that claim his attention.

For Michael, each day is a new experience.

And each day presents its own magic. His imaginative thoughts run helter-skelter across the hours. Everything needs examination; most everything captures at least a momentary interest. And it's important to remember that each day he's copying a little more of his parents' behavior and absorbing a few more of their attitudes.

You don't need an expensive camera; you do need to know how to get the best results from camera and film. But there are books and pamphlets to help you in your local library. You'll also need to order a lot of patience to help you deal both with your subjects and your disappointments.

But by taking a few pictures of the children each month, you do build a record of their growing up. As young people, they'll scoff at your family album; but, as they become parents, they'll treasure their family record. And you do give grandparents an opportunity to join the G.W.P.I.P. (the unofficial association of grandmothers-and-grandfathers-with-pictures-in-purse).

Happy, thoughtful, searching—pictures can capture a child's moods and musings. In the present they remind adults to keep their own imaginative and child-like interests alive; in the future, they will warm older hearts with their memories. V



*Theme song: You can hang your clothes on a hickory stick but don't you dare go near the water.*



*A merry-go-round ride is fun for Michael. Older now, he's developed many interests.*



*With this growth he attempts more complicated activities. Is he an architect in the making?*



*Learning to co-ordinate his faculties of mind, sight and hearing, he finds it's real fun to make music. (?)*

## Signs of Spring

ONE of the earliest signs of spring is beckoning from shop windows and fabric counters across the country, as glorious spring prints displace the heavier winter-wear materials.

There is a fluidly slim look to spring fashions. An easy fit with close-to-the-body shaping is achieved by bias-cutting of the fabric. Designers have recognized the active life led by modern women and have worked with this in mind. So that you will look graceful in motion, there is a freeness in skirts through released darts, bottom flare and pleats. Whatever the skirt line, most jackets are slightly fitted and cropped off smartly at the waist or hip top.

Softly pleated or full-skirted dresses are perfect for this spring's printed silks, synthetics and cottons. The classic shirtwaist is still a fashion favorite, and fabric manufacturers are offering such variety in materials and colors that no two need look alike.

There's a marked diagonal line in the silhouette. Fastenings on dresses, coats and suits often slant to the side instead of a straight up-and-down line.

Even more emphasis is being placed on a costume effect. Coat and dress costumes are particularly popular. Summer coat costumes feature collarless coats fastened with large buttons; coat and dress ensembles contrast rather than match, although coats may be lined with the silk print of the dress underneath.

If you've been wondering whether shortening your hemlines last year was a good idea, you can stop worrying right now. Skirt lengths this year are shorter, if anything. Of course this is one thing that you must adjust for your own height, figure and peace of mind.

The costume look has caught up with casual clothes and sportswear, too. Every piece "goes" with something else to make a co-ordinated outfit. The striped fabrics are good for these.

### THE COLOR SCENE

The bloom from spring orchards and summer flower borders is captured in the new fabric colors. Airy, light, clean, clear and fresh are words used to describe the pastels and bright tones. More vivid are the glowing tones taken from the tropic zones. Mauve influences the pinks and blues, and pink breaks out all over the fashion scene. True violet shades into purpled reds and royal blues. But the real feeling of spring reaches out in appealing fruit tones. It's natural that the fresh green of new-budding leaves is a popular color choice for spring.

### FABRIC REVIEW

**Cottons.** There are entirely new classes of cotton this year, as the cotton industry proclaims the right of its fiber to first place in the spring and summer fashion field. New boucle and crepey textures, tapestries, textured hand-loomed effects and knits with built-in resistance to crushing are available. Although little is said about washability, most of the new cotton fabrics are washable. Pretty sheers, embroidered, color-woven and color-printed, are another new development. Many types of cottons are color co-ordinated for use in costumes.

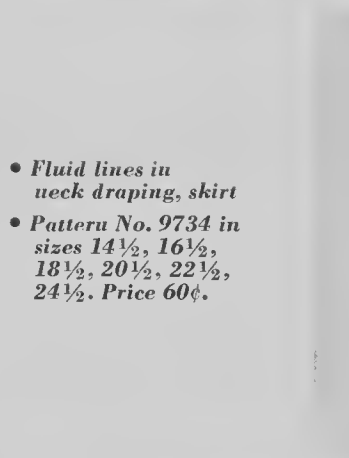
**Synthetics.** New use of the Dacron yarns has produced a group of silk-like fabrics which offer the nearest to ideal drip-dry performance yet achieved. There is a wider-than-ever selection in basic synthetic fabrics and in blends as well. Voile-types offer a softened touch and greater strength. One new lightweight fabric resembles a cross between shantung and broadcloth in texture. New broadcloths are softer and more silk-like, and vibrant with spring color.

**Spring Wools.** Lightweight wools and blends of wool with silk, mohair, linen and rayon complement the costume fashions. Jerseys and knitted fabrics include new lacy sheers.

- Spring-fresh florals
- Diagonal draping
- Fluid skirt fullness
- Pattern No. 9727 in sizes 11, 13; 12-16. Pattern price 60¢.



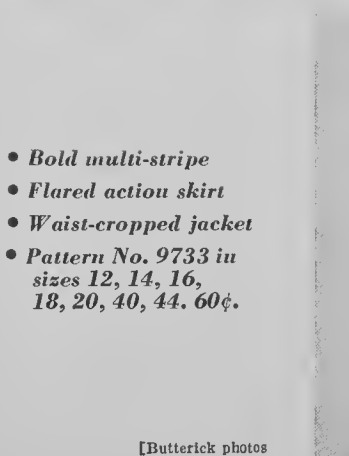
- Blouson ease
- Fabrics are costume color-co-ordinated
- Pattern No. 9669 in sizes 10, 12, 14, 16. Price 50¢.



- Fluid lines in neck draping, skirt
- Pattern No. 9734 in sizes 14½, 16½, 18½, 20½, 22½, 24½. Price 60¢.



- Slim simplicity
- Jacket in print
- Hip-top jacket
- Pattern No. 9701 in sizes 11, 13; 12, 14, 16, 18. 60¢.



- Bold multi-stripe
- Flared action skirt
- Waist-cropped jacket
- Pattern No. 9733 in sizes 12, 14, 16, 18, 20, 40, 44. 60¢.



[Butterick photos]

# BONDEX®

hot iron patches for all mending

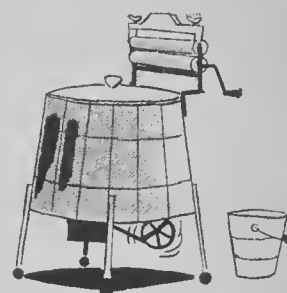


Here's the modern answer to all fabric repair and garment patching problems.

Bondex Press Patches, convenient, reliable, offer the greatest selection of colours, sizes and types at the most economical prices available.

Ask for Bondex at your favorite store.

J. & P. Coats (Canada) Ltd., Montreal  
Registered users of Johnson & Johnson's Permacel  
Trademark Bondex



## REMEMBER the old washer?

Grandma never knew the convenience of our automatic washers. But she always had spanking white clothes! Grandma did have the convenience of Mrs. Stewart's Bluing. The easiest part of her whole washday routine was bluing her clothes to a white white.

... also remember Mrs. Stewart's Bluing. The old yet ever new and effective method for keeping all white clothes white.

**MRS. STEWART'S BLUING**  
287 Stanley St., Winnipeg 2, Man.

## Ladies: SLIM your waist ..relieve your BACKACHE



with new Non-Slip  
**Pi Peer Princess BEAUTY BELT**

Strictly for the ladies! New Princess relieves strain on tired back muscles—buoys you up firmly yet gently—gives you that welcome "rested" feeling that lets you work or play without nagging, energy-robbing discomfort. Takes inches off your tummy without that bound, "corseted" look. Delicately feminine in style. Weighs just 4 ounces—hugs your hips like the skin itself. Adjusts in seconds. Foam rubber back pad for extra-gentle support. Only \$4.98 postpaid. Give hip measure. Removable long garter attachments available—50¢ for set of 4. 30-day money-back guarantee.

PIPER BRACE (CANADA) Dept. CG-21L  
7024 Cote des Neiges Rd. Montreal 26, Que.

## Woman Tortured by Agonizing ITCH

"I nearly itched to death for 7½ years. Then I discovered a new wonder-working creme. Now I'm happy," writes Mrs. D. Ward of Los Angeles. Here's blessed relief from tortures of vaginal itch, rectal itch, chafing, rash and eczema with a new amazing scientific formula called LANACANE. This fast-acting, stainless medicated creme kills harmful bacteria germs while it soothes raw, irritated and inflamed skin tissue. Stops scratching and so speeds healing. Don't suffer! Get LANACANE at druggists!

## Sociable Security

by EVELYN WITTER

**A** FEELING of security is one of your baby's most important needs. Satisfying this need is your job. It is up to you to make him feel safe, snug, and wanted. How? It can be done with companionship, sympathy, guidance and love.

Companionship with baby means sharing experiences with him on his level, not dictating his activities from "away up there" on the pinnacle of authority. Take playing with building blocks for an example. Play the game according to his abilities, just as you would play with a partner in a sociable card game. When you sit down to play, don't you take care to ask "What are the rules?"

When you sit down on the floor with baby, why not give him the same consideration? "What are we trying to build?" you might ask, instead of monopolizing the game. It's easy to take charge of the blocks and proceed to build a tower when all the time baby thought he was making a choo-choo.

You've probably seen this. Baby was shoved out of the playing and, as a result, neither player was really interested. There was no comradeship. If on the other hand, both parent and baby shared in the play both had a wonderful time. This is "social-able" companionship.

**S**YMPATHY toward your child is the seasoning of security. Too much seasoning spoils the dish. Used with care and judgment, it brings out the good flavor of a parent-child relationship. Haven't you noticed the tremendous healing power of mother's kiss on a bump or a bruise?

Your interest in baby's learning processes makes you sympathetic toward his difficulties. For example, I remember when I was trying to teach our little Louise to feed herself. When she skidded the food all over her plate, herself, and the floor, I became exasperated and muttered to myself as I cleaned up the mess. She cried. Then she gave up trying.

"Here, I'll take over," my husband said.

He sat down beside her chair, and talked to her. "Learning to hold the spoon is hard, isn't it, honey?" He smiled at her. "I know just how you feel. All thumbs. The way I felt the first time I tried to bait a hook."

He manipulated the spoon and then gave it to her to try. Children learn by imitation. In this atmosphere of sympathy and understanding, Louise easily and happily learned the technique of self-feeding.

**T**HIS leads us right to the third point in sociable security. Guidance. Because adults are often in a quandary as to what is right and what is wrong, baby, too, is often confused. Chastisement for wrongdoing is not enough. With the spanking of hands, he needs an explanation to help him understand why the punishment is just. He feels secure with just treatment . . . insecure with unjust treatment.

On the other hand, guidance is necessary not only when baby does wrong. It is needed when he does right, too. When he picks up his toys and puts them where they belong, he should be praised. We all like credit for our accomplishments. The snug, secure feeling we get when our good deeds are recognized spurs us to do better.

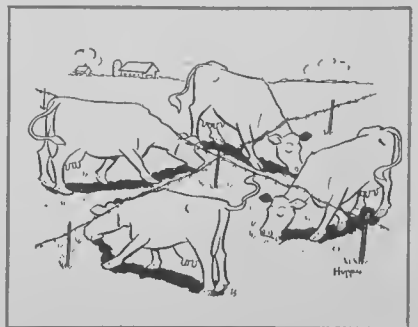
**T**HE last, perhaps the most important ingredient of security is love. Baby senses your love. But he needs more than an abstraction. He needs to feel it and be told about it.

If you tell him you love him, you bolster his awareness of his place in your heart every time you say it. The other night as I was watching television with our oldest, I reached over and took his hand. As I have done so many, many times, I said "I love you, Jimmy." He squeezed my hand tightly and smiled. And as he leaned back with the relaxed posture that comes with a feeling of security, the look in his eyes told me you can't say "I love you" too often or too much. V

## Sweater Care

**C**ORRECT washing can keep your family sweaters looking like new. One important point is to wash them before they become badly soiled and soil spots become fixed. To protect the bright colors in striped and checked sweaters, and to prevent colors running, soak the sweater in cool salt water before washing. Salt will set the colors. To hasten drying of these and bulky sweaters, place a towel inside between the front and back. After drying, place the sweater on an ironing board. Cover with a wool press cloth, and set your steam iron dial at wool. Press the front, back and sleeves of sweater, following the length of the knit. The pressed sweater will be clean, soft and beautiful, ready to be worn again. Fold it lengthwise and place in a bag or tissue paper before storing in a drawer.

Cardigan sweaters should be buttoned before washing. Insert a cloth inside the sweater from neck to bottom to prevent button impressions being made on the sweater back while it dries. If the closing is faced with grosgrain ribbon, pull ribbon taut to its proper length when laying it out to dry. Pin the top and bottom of the ribbon with rust-proof pins. Hold the ribbon firmly in place while pressing. V



## new fashion shades in Super-Sheen

Coats Super-Sheen—the standard of Fashion and Quality for generations of discriminating users — has 40 exciting new Fashion Shades for 1961. With the widest choice of Boilfast shades at counters everywhere, and with Coats quality as your assurance, there's no reason to compromise the quality of your garments with ordinary threads. Remember — Fashion hangs by a thread. Be sure your thread is . . . Coats!

For discerning homemakers — It's Coats  
J. & P. COATS (CANADA) LTD., MONTREAL

NOW

# SOOOOTHE

## THAT PAIN AWAY WITH ABSORBINE Jr.'s NEW PRES-O-MATIC APPLICATOR

Next time you're stiff and sore with tired aching muscles, try Absorbine Jr. with its New PRES-O-MATIC APPLICATOR. The new PRES-O-MATIC makes it so pleasant and easy to rub on Absorbine Jr. There's no spill, no waste — just pure relief!

LOOK FOR THIS NEW PACKAGE at drug counters across Canada. (Also available in regular 4 oz. and 12 oz. bottles.)

W. F. YOUNG, INC., MONTREAL 19, P.Q.

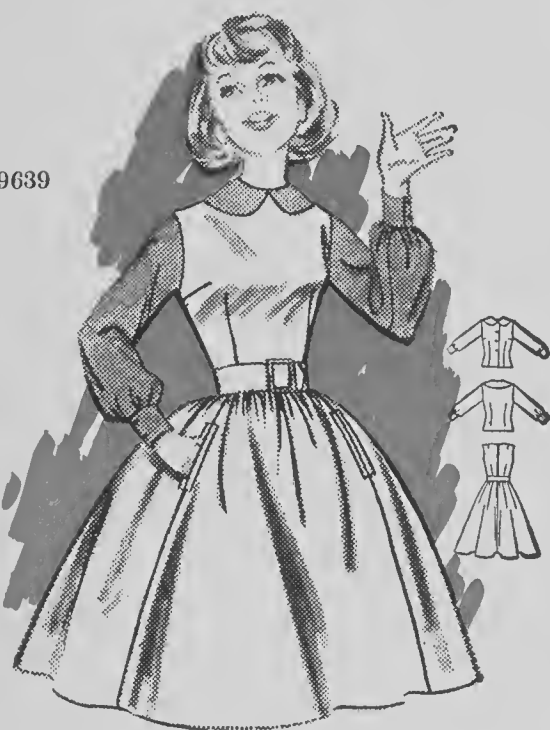




*Free-stepping skirt  
fullness may be*

# Gathered or Pleated

9639



No. 9639. Made in cool and warm fabrics, this full-skirted jumper may be worn all year, with or without its blouse. Young Junior sizes 9, 11, 13; Teen 10, 12, 14, 16. Price 50¢.

9637

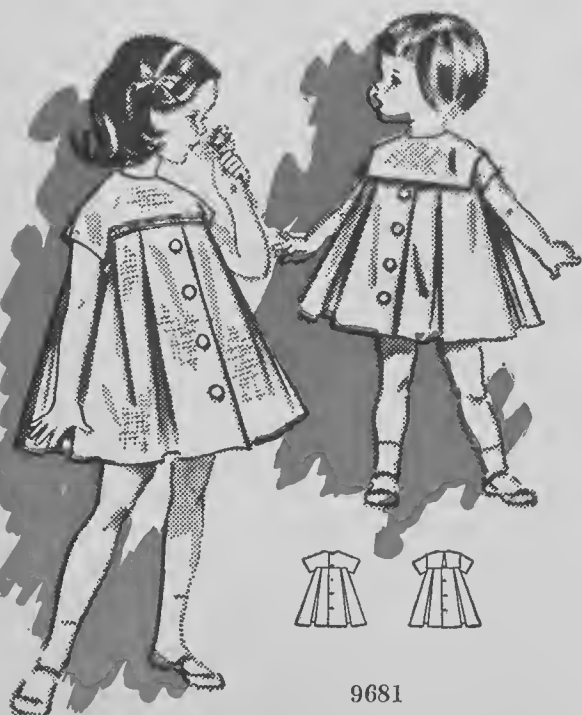


No. 9637. Tucked and collared or collarless in contrasting pattern, the dickey for this V-necked dress is separate. Young Junior sizes 9, 11, 13; Teen 10, 12, 14, 16. Price 50¢.

9682



No. 9682. Pert puffed sleeves and skirt gathers are set in the yoke of the toddlers' dress; so are the coat's straight sleeves. Toddlers' ½, 1, 2, 3. Price 40¢.



9681

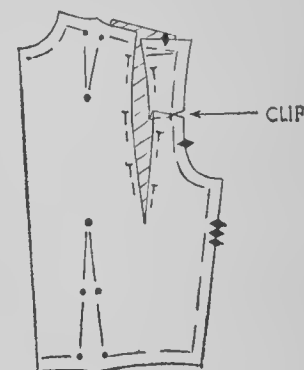
No. 9681. Box pleats drop crisply from the yoke of this girl's dress. Front buttons are only trim; the dresses open from neck to hem at back. Girls' sizes 1, 2, 3, 4, 5 and 6. Pattern price 40¢.

## Clip and Save Sewing Hints

### Adjusting Patterns

#### Adjustment for Broad Back

Slash pattern from shoulder straight down about 10 in. Spread and add tissue one-half the total width needed. Bring shoulder edges together, forming a small dart. Clip seam allowance so pattern lies flat. Straighten shoulder edge of pattern as shown.

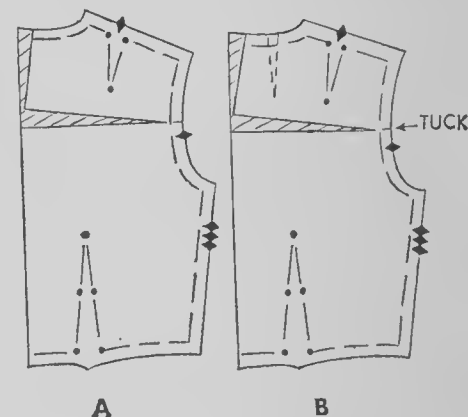


#### Adjustment for a Rounded Back

A. Slash pattern just above the armhole notch. Spread and add tissue as indicated by the shaded section.

B. Straighten center back by adding tissue as shown. This automatically adds size to the neckline.

To restore original neck size, add an extra dart at neckline the same size as amount of tissue added at center back.



—Courtesy Butterick Sewing Book

### The Country Guide Pattern Department

1760 Ellice Ave.,  
Winnipeg 21, Man.

528 Evans Ave.,  
Toronto 14, Ont.

Please send Butterick

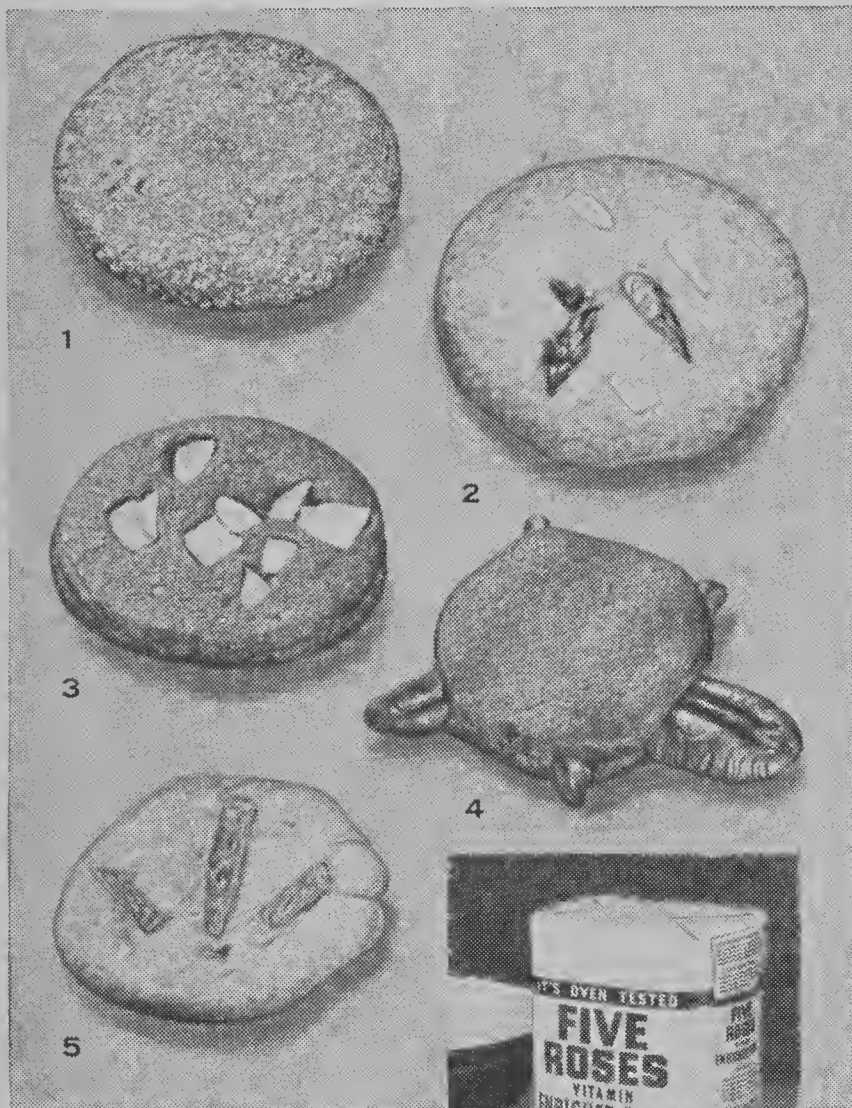
Pattern No. \_\_\_\_\_ Size \_\_\_\_\_ Price \_\_\_\_\_

Pattern No. \_\_\_\_\_ Size \_\_\_\_\_ Price \_\_\_\_\_

To \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Pick your favourites... Bake 'em all at once!



*Delicious, time-saving ideal  
A whole variety of cookies in one  
baking step. Just follow this easy  
recipe, and use Five Roses —  
the all purpose flour that makes  
all your home-baking better.*

## Basic Refrigerator Dough Recipe

$\frac{2}{3}$ cup butter	$2\frac{1}{4}$ cups Five Roses
1 cup brown sugar	Pre-Sifted Flour
1 egg	$\frac{1}{4}$ tsp. salt
1 teaspoon vanilla	$\frac{1}{2}$ tsp. baking soda

Cream butter. Gradually add brown sugar and cream well. Add egg, vanilla, and beat well. Sift flour with salt and baking soda; stir into batter. Use dough as is or in any of variations listed below. Shape finished dough into long rolls, about 2" in diameter. Cover with waxed paper and chill until hard. Slice thinly, place on cookie sheet. Bake at 350° for 7-10 mins. Makes 6 dozen cookies.

## Variations (use $\frac{1}{3}$ of dough for each variation)

- |   |   |
|---|---|
| 1. <b>Sandies:</b> Bake a plain cookie. Dredge with (coloured) powdered sugar while still warm.       | for chocolate dough. Add 4 tbsps. chopped nuts.   |
| 2. <b>Jewel:</b> Add 2 tbsps. chopped red and/or green maraschino cherries and 2 tbsps. chopped nuts. | 4. <b>Turtles:</b> Between 2 slices of chocolate dough, place whole pecan (for head) and 4 pieces chopped pecan (for legs). |
| 3. <b>Chocolate Nut:</b> Add 1 oz. melted unsweetened chocolate                                       | 5. <b>Orange:</b> Add $1\frac{1}{2}$ tbsps. grated orange rind.   |

# FIVE ROSES FLOUR

CANADA'S MOST RESPECTED NAME IN BAKING

## IN THE KITCHEN

Pep up late winter menus with

## Crispy Fried Foods

by GWEN LESLIE

SOMEWHERE in your kitchen utensils you have a secret weapon for banishing late winter menu blues. It's your deep fat frying kettle (any deep 3-quart kettle will do). A fit-in basket makes it easier to remove cooked foods from the kettle and a frying thermometer will help you obtain and maintain the proper frying temperature.

Recommended frying temperatures generally range from 365°F. to 375°F. A temperature which is too low increases the amount of fat absorbed by the food during the longer cooking time required. Too high a temperature hastens the breakdown of the fat and overcooks the crust on the food being cooked. Cubes of bread can be used for a temperature test if you have no thermometer. Add food to the preheated fat in small quantities so that it will reheat quickly to the proper cooking temperature.

The frying fat can generally be re-used. The odor and flavor-causing elements in the foods being fried are usually lost into the air; but you will want to remove any crumbs. Cool the fat slightly, then strain it through several layers of cheesecloth into a dry, clean container. Cover and store in the refrigerator. Cool storage is needed because the anti-oxidants which give fat its keeping qualities at room temperature are lost in heating. When you wish to use it again, remember to add some fresh shortening or cooking oil to replace fat absorbed in the previous cooking. Never fill the frying kettle more than  $\frac{1}{3}$  full of fat.

## Spiced Doughnuts

$3\frac{1}{2}$ c. sifted all-purpose flour	$\frac{1}{2}$ tsp. mace
2 tsp. baking powder	1 tsp. salt
1 tsp. baking soda	2 eggs
$\frac{3}{4}$ tsp. cinnamon	3 T. shortening, melted
$\frac{1}{2}$ tsp. nutmeg	1 c. sugar
	$\frac{3}{4}$ c. buttermilk

Sift measured dry ingredients together. Beat eggs, add melted shorten-

ing (or cooking oil), sugar and buttermilk. Add sifted dry ingredients all at once, beating only until smooth. Place dough in the refrigerator for at least 1 hr. Roll dough  $\frac{1}{2}$  in. thick on a floured board. Cut doughnuts with a floured doughnut cutter. Fry, a few at a time, in deep fat preheated to 365°F. (at this temperature a  $\frac{1}{2}$  in. cube of white bread browns in 40 seconds). Drain cooked doughnuts on absorbent paper. Dust doughnuts with spiced or plain sifted icing sugar.

## Raised Orange Doughnuts

$\frac{3}{4}$ c. milk	1 T. grated orange rind
$\frac{1}{2}$ c. sugar	$4\frac{1}{2}$ c. sifted all-purpose flour (about)
3 T. shortening	Shortening or salad oil for frying
$\frac{3}{4}$ tsp. salt	$\frac{3}{4}$ c. sugar
$\frac{1}{2}$ c. lukewarm water	$\frac{3}{4}$ tsp. cinnamon
1 tsp. sugar	
1 pkg. dry yeast	
2 eggs, well-beaten	

Scald milk; stir in the  $\frac{1}{2}$  cup sugar, shortening and salt. Cool to lukewarm. Meantime, measure lukewarm water into a large mixing bowl; stir in the 1 teaspoon sugar. Sprinkle with yeast. Let stand 10 mins., then stir well. Stir in lukewarm milk mixture, well-beaten eggs, orange rind and  $2\frac{1}{2}$  cups of the flour. Beat until smooth and elastic. Stir in sufficient additional flour to make a soft dough (about 2 cups more). Turn dough out on floured board or canvas and knead until smooth and elastic. Place in a greased bowl; grease top of dough and cover. Let rise in a warm place, free of draft, until doubled in bulk (about  $1\frac{1}{4}$  hr.).

Punch down dough. Turn out on a lightly floured board or canvas and shape into a smooth ball. Roll out dough to a scant  $\frac{1}{2}$  in. thickness and cut with a floured doughnut cutter. Place the rings of dough on a lightly floured cookie sheet. Cover with a tea towel. Let rise in a warm place, free from draft, until doubled in bulk (about  $\frac{3}{4}$  hr.). Place risen doughnuts, a few at a time, into shortening or salad oil preheated to 375°F. If you have no deep fat frying thermometer, you can test the temperature by dropping a cube of day old bread into the fat. At 375°F. the cube will brown nicely in 50 seconds. Cook doughnuts



[Canada Spice Association photo]  
Crispy fried doughnuts fresh from the kettle are popular with the milk set and hot beverage fans alike. Serve sugared or plain as snacks or dessert.

until golden, turning once. Drain on crumpled absorbent paper, and shake in a paper bag holding a mixture of the  $\frac{3}{4}$  cup sugar and cinnamon.

### Golden-Fry Batter

$\frac{1}{2}$  c. cooking oil     $\frac{1}{2}$  c. milk  
1 c. sifted all-    1 large egg  
purpose flour

Stir oil into flour, mixing until smooth. Add milk and egg and beat with a rotary beater until smooth. (Batter will be thin.) Dry foods thoroughly, then dust lightly but evenly with flour. Dip floured foods in batter to coat the entire surface; lift out and drain off excess batter. Fry in deep fat preheated to 375°F. until food is cooked tender and crust is golden brown. Drain on absorbent paper. Season and serve or keep warm in heated oven.

**Suggested Foods.** Golden-fry batter gives a crisp, golden crust to broiler

chicken pieces, fish steaks, serving pieces of fish fillets, oysters, shrimps, smelts, and scallops. You may wish to try batter-frying parboiled small carrots and parsnips, onion rings, eggplant slices, small pieces of cauliflower or turnip sections. Apple rings and rings of pineapple may be dipped and deep-fat fried as garnishes for the main course.

### Fritter Batter

1 c. sifted all-    1 egg, slightly  
purpose flour    beaten  
 $\frac{1}{2}$  tsp. salt     $\frac{3}{4}$  c. milk  
1 tsp. baking    1 T. cooking oil  
powder

Sift flour, salt and baking powder together into mixing bowl. Combine egg, milk and oil in a small bowl; add to dry ingredients, mixing only until smooth.

This batter may be used for dipping fish, chicken or vegetables where a leavened batter is desired. It may also be used to make drop fritters.

**Drop Fritters.** To the fritter batter given above, add  $1\frac{1}{2}$  cups drained, cooked, chopped vegetables (with cream-style corn, omit milk from batter), 1 cup chopped minced seafood (clams, crabmeat, canned salmon, fillets, etc.), chicken, veal, ham or beef. Drop fritter mixture by spoonfuls into deep fat frying oil or melted shortening, pre-heated to 375°F. Cook until golden brown, about 4 to 5 mins.  $\checkmark$



[Canada Starch Co. photo]  
Deep-frying fat should be strained and refrigerator-stored for re-use.

### Key to Abbreviations

tsp.—teaspoon	oz.—ounce
T.—tablespoon	lb.—pound
c.—cup	pt.—pint
pkg.—package	qt.—quart

## We Eat with Our Eyes

COLOR plays an important role in the appetite appeal of foods. The reds, yellows, and greens of vegetables bring a rainbow to the table. Fruits add a color note, too, and accent the browns and white of other foods.

Colored table coverings, china, and glassware can all help to make the meal setting "pretty as a picture." That is, of course, if the table setting complements the colors of the food so that there is harmony and not discord.

Fortunately it's not difficult to choose a combination of foods that look attractive together and taste good. It would be a mistake to let the urge for artistry destroy the balance of flavors. So, after nutritional balance, the first emphasis in meal planning must go to good cooking and the combination of flavors. But appetite appeal for the variety of food included in the menu depends largely on the appearance of that food.

### Reds Add Zip

Red adds a gay note to a meal. Cranberries, apples, strawberries and cherries are a pure red. Tomatoes, pimento and most kinds of paprika are an orange red. Beets, plums and raspberries have a purple-red tone. And then there are jellies, fruit gelatins, and food coloring which may be used to add a touch of red as well.

In meal planning, the value of the reds should be considered, if discord is to be avoided. The color of beets and tomatoes clash as badly on a din-

ner plate as when worn as part of a costume or used together in the decoration of a room.

### Red Garnish for Meat

There are a number of ways of applying a red color scheme to the meat platter. Pineapple slices may be topped with a cherry or alternatively cranberry preserves, relish, or a red jelly. You may heat pineapple slices or chunks in pineapple juice to which red fruit coloring or maraschino cherry juice has been added.

Apples take on an appetizing red hue when simmered in a sugar syrup colored with food coloring or maraschino cherry juice. The apples, may be used whole, or half-pared (cored or not) according to size; they may be sliced or cut in wedges.

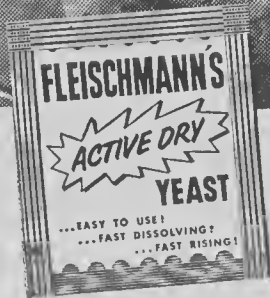
Red pickled onion slices are savory meat garnishes. Peel and cut large Spanish onions into  $\frac{1}{2}$  inch slices. Cover with water and boil 5 minutes. Drain. Then cover with a hot syrup of 1 c. canned beet juice, 2 T. sugar, 2 T. vinegar, 1 tsp. salt and a few whole cloves. Drain slices before serving hot or cold.

Tomato purée gives a brighter color to a sauce than canned tomatoes. A spoonful of hot well-seasoned tomato juice looks gay and tastes wonderful on hot cauliflower, cabbage, celery, and other white vegetables.

### Use Blue on the Table

If you wish to use blue in your color scheme, let the table decorations bear this color. There are very few

## There's nothing just like Onion Pinwheel Buns ...so spicy-nice!



When you bake at home it's much easier with Fleischmann's Active Dry Yeast. There's less fuss, less preparation . . . and if you follow our recipes carefully, you'll never need to worry "will it work?" It will! And you'll feel so proud!

### You'll need

#### for the dough:

$\frac{3}{4}$  c. milk  
 $\frac{1}{4}$  c. granulated sugar  
2 tsps. salt  
 $\frac{1}{4}$  c. shortening  
 $\frac{1}{2}$  c. lukewarm water  
2 tsps. granulated sugar  
2 envelopes Fleischmann's  
Active Dry Yeast  
2 eggs, well beaten  
4 c. (about) once-sifted  
all-purpose flour

#### for the filling:

1 c. coarsely-chopped onion  
 $\frac{1}{4}$  c. butter or Blue Bonnet Margarine

#### for the topping:

1 egg yolk  
2 tbsps. cold water  
poppy seeds

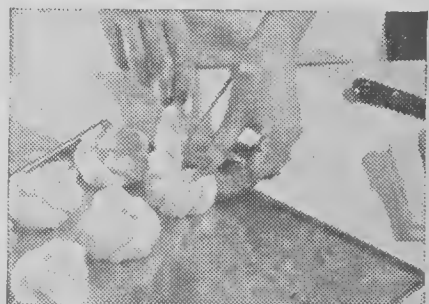
1. Scald milk, stir in  $\frac{1}{4}$  c. granulated sugar, salt and shortening. Cool to lukewarm.



2. Meantime, measure lukewarm water into large bowl and stir in 2 tsps. sugar. Sprinkle with yeast. Let stand 10 mins., then stir well. Stir in lukewarm milk mixture, well-beaten eggs and 2 c. of the flour. Beat until smooth and elastic. Work in remaining 2 c. (about) flour.



3. Knead dough until smooth and elastic. Place in greased bowl. Grease top. Cover. Let rise in warm place, free from draft, until doubled in bulk—about 1 hr. Meantime, slowly cook onion in butter or margarine, stirring often. Cool.



4. Punch down dough, knead until smooth. Roll out to 12" x 18". Spread  $\frac{1}{2}$  dough lengthwise with onion mixture, cover with unsprayed  $\frac{1}{2}$  of dough and cut crosswise into 18, 1" strips. Twist each strip several times, then place one end on greased cookie sheet and wind rest of strip around it; tuck end under. Cover. Let rise until doubled—about  $\frac{3}{4}$  hr. Brush with mixture of egg yolk and cold water. Sprinkle with poppy seeds. Bake in hot oven, 400°, about 15 mins. Makes 18 savory buns to serve with soup, salad, cold cuts.



## We Eat With Our Eyes

(Continued from page 73)

blue foods, and foods tinted blue artificially are not very appetizing.

### Green Brightens

Fortunately for menu color planning, there are many green vegetables. What a difference green peas, beans, broccoli, asparagus or spinach make in a meal. Pork chops, mashed potatoes, gravy and cauliflower taste well together but the plate looks so uninteresting! Add some bright peas, and the color picture is greatly improved. Then add a dash of red paprika to the potatoes, red-skinned apples or tomatoes to the salad, or a red garnish for the meat. The appetite appeal is urgent.

### Yellows Are Easily Added

Yellow and orange are natural food colors. The yellow vegetables are so familiar and so popular we take them for granted. Remember to use them one at a time, in combination with a pleasing contrast in color.

Picture-pretty meals are easy to plan and serve—don't leave the color appeal in your menu to chance. The family breakfast needs color as much (and possibly more) than the company dinner.

Someone said "We eat with our eyes." That's not the whole story, but it does point up the need to picture-test the meals we serve. Is it drab? Or is it gay? Is it just food, or does it show the masterly touch of a culinary artist?—G.L.



## UPSET TUMMY?

Teething and fretful?  
Here's what to do!  
STEEDMAN'S for baby  
Rest for you!

Gentle, helpful relief for digestive upsets,  
constipation, teething discomforts.

## STEEDMAN'S POWDERS

When Writing to Advertisers  
Please Mention The Guide.

### ARTHRITIC PAIN ROBBED HER OF SLEEP WOMAN FINDS RELIEF!

"I just had to write and tell you how good DOLCIN has been to me. I suffer from arthritic pain in my hands, and the nagging ache of it used to keep me awake, rolling and tossing night after night. Then I tried DOLCIN. With my first bottle, I found I was able to sleep more comfortably, relieved from that terrible pain. I'm sure I'll never be without DOLCIN again, now that I have discovered what a help it is". (Mrs. Alice Matthews, St. John, N.B.)

All over Canada, arthritic pain sufferers like Mrs. Matthews get help from DOLCIN. DOLCIN relieves arthritic and rheumatic pain, sciatica, lumbago, bursitis and muscular pains. Get DOLCIN today at your druggist's.

61-1

People in a pioneer  
community took up a collection  
and guaranteed his first year's salary

# A One-Man Medical Plan

by RICHARD COBB

THE first municipal doctor in Saskatchewan, and probably the first in North America, is now living in retirement at Jordan River in one of the more remote and beautiful parts of northeast Saskatchewan.

Dr. Henry Joseph Schmitt and his young wife left their home in south-central Illinois during 1914 and settled at Holdfast, northwest of Regina. He had been lured by newspaper advertisements that told of the "Last Great West." At first, he wasn't sure whether he wanted to stay on the Prairies, especially as he didn't know whether he could make a living there. But the people of Holdfast lived up to the town's name. They were determined to have a doctor, and they knew a good man when they saw one. So the next thing he knew, they had passed the hat round and collected \$10 per family, and they were offering him \$1,800 as a year's salary.

After that, the municipal council decided to make it official by accepting the responsibility for the doctor's salary. They exceeded their legal authority by spending money for this purpose, but the provincial government of the day decided to look the other way. In time, the idea was given legal sanction, other municipalities followed suit, and there were about 100 such schemes in the end. Unwittingly, Dr. Schmitt had started a new trend in medical services.

Those were rough and ready days. The farms around Holdfast were mostly unfenced, and the Mounties had to keep an eye on the theoretical fencelines to avert disputes. The nearest hospital was at Regina, so a doctor had to go about his work without much help, except from his hardworking, self-sacrificing wife. Mrs. Schmitt measured up to her new tasks and was able to bring up their three boys and two girls at the same time.

They stayed at Holdfast for more than 16 years, and in 1930 they moved to Waldheim, north of Saskatoon. For 3½ years they lived there through rugged drought and depres-



[Guide photo]  
Dr. H. J. Schmitt's pipe goes with him when he is called out of retirement.

sion years, and then moved on to Arborfield in the northeast of the province. This pleased Mrs. Schmitt especially, because she had always wanted to live where there were trees. Arborfield, as its name suggests, had plenty of them.

DR. SCHMITT always inspired confidence and affection wherever he went. A man who would go anywhere to minister to the sick or injured, or to deliver a baby, he was always outspoken and had an endless stock of hilarious stories. He was a man that farmers, often leading hard and lonely lives, could like and trust.

The Doc was a countryman at heart, too. He brought a gig with him and made light of his long and difficult journeys in all kinds of weather. The gig was a Eureka Hammock Cart, which he saw advertised in the Medical Journal as ideal for the country doctor. It certainly was. Nothing delighted Dr. Schmitt more than to set out with his horses. "They always took me there and brought me back," he says, "and they're better than any hunk of tin that was ever made."

So he would set off in his "mud slinger," as he calls the gig. Out of his fund for yarns, he recalls the time when he was driving past a farm where a man lived alone. On the gate was a note, which read: "Please come in and see me, Doctor." So in he went and found the patient lying there, complaining that he was so bad he couldn't walk. "Then how did that note get on your gate?" asked the Doctor. The story ends there, sparing the lonely farmer the embarrassment of a reply.

Farming was in the Doctor's blood, although he always seemed to be too busy for it. But in 1949 he bought some registered Hereford cows, which were to start two of his sons on farming careers. The herd is now around 100, and they had a calf crop of 32 last spring.

The Doctor lives on his farm a few miles from Arborfield at Jordan River, where they have a half-section. Two of his sons do all the farming now. His wife has her trees, scores of them, and they have a useful piece of garden and some poultry. They take things a little easier now that he has retired officially from medicine. But he still helps out if the local doctor is indisposed, and he sometimes doctors the livestock for his sons.

Another son is an elevator superintendent in the Swift Current district, while the two farmers of the family have increased their holdings and are doing well too. Both daughters are married, one living in Arborfield and the other in Toronto.

In 1954, Dr. Schmitt was elected to senior membership of the College of Physicians and Surgeons of Saskatchewan. "We all get it after 40 years, if we behave ourselves," he says. But what a tremendous 40 years they have been. There are countless farm families with reason to bless the day that Doc Schmitt and his wife heard the call of the "Last Great West" and set course for Saskatchewan.

## Wedding Gift

by EVELYN WITTER

WHEN we first moved to our farm, a lady in her 80's brought us a wedding gift. She had been a dear friend of my husband's since his boyhood days and her gift was a very young maple sapling.

"Some day," she said, "this will be a beautiful tree and will grow lovely, as I hope your lives together will." We three had a tree-planting ceremony to welcome our tiny maple.

It was in the shade of that tree that our babies had their carriage naps. It was around the tree they learned to

crawl. Their first steps were balanced by the maple's trunk. By the maple they learned the names of our native birds that flew into its foliage. We've had many happy picnics in its shade.

In this, the 17th year of our marriage, our eldest child, 11-year-old Jim, is stealthily stepping around the tree with bow and arrow, imagining he is an Indian on the warpath.

While he plays, I am remembering the wedding gifts we received. I recall only a few; but I know the maple sapling was the loveliest of all.



"And if you don't make good in ballet, you can always get a job stamping out grass fires."

ARE YOU HAPPY? Thoughts of Optimism and Hope can accomplish a great deal. Peace, Health, Love and Prosperity are the dreams of man—the sole basis for "being" and "doing." Send 50 cents today for our leaflet "UNITED CONSTRUCTIVE THOUGHT" to THINK-BE, Dept. C, 19737 Coleman, Mt. Clemens, Michigan, U.S.A.



You can open a new world of entertainment to your children by

## Making a Puppet Box

by LORRIE McLAUGHLIN

WHEN long, cold winter days begin to drag, or a snowy day keeps them indoors, children become restless. When they ask, "What can we do now?" I know it's time to bring out the puppet box.

We started our puppet box years ago when the children were quite small. Its growth has kept pace with the youngsters. Now bits and pieces fill a big cardboard carton in the attic.

Our puppet box began with scraps of material and the odds and ends to be found around the house. Eventually, it became a habit for me to drop stray pieces of material or strings of broken beads into it for future use.

If the youngsters show a special interest in puppet making, it may become a full-scale hobby and rate more than a box in your home. Around our house it's a "special time" interest, one that pleasurably fills many happy hours both winter and summer.

You need some basic equipment to get started. In addition to whatever scraps of fabric, paper, jewelry, and so on you have on hand, you need the tubes from rolls of wax paper or foil, poster paint or crayons, newspapers and glue. Later, you'll want a stage of some sort. One of the large cardboard cartons in which refrigerators or similar large items are packed is ideal because an opening can be cut high in front for a stage, while the puppet-working youngsters remain concealed beneath the lower half of the box. However, a table draped with a blanket or sheet makes a good stage, and lets the children sit out of sight.

Puppet making can be anything from a part-time fun thing to a full-scale hobby, but you'll find it easier to begin with one of the seven easy-to-make puppets described.

THE easiest puppet of all—especially for really young children—is one made from a small paper bag. Fill a brown paper bag with crumpled paper so that it becomes head-shaped; insert a length of cardboard tubing into the opening; then tie the end of the bag firmly into place around it. With a face painted on with crayon or poster paint and yarn hair glued into place, you have your first puppet head.

A less durable puppet—but one that's fun to make—can be created from a potato. These vegetables come in such an assortment of shapes and sizes that they can be used to create weird gnomes and elves. Use thumb tacks and paint for features on the

face, and paper or pipe cleaners for hair. Hollow an opening in the lower part of the head and insert a cardboard tube.

Tiny puppet heads can also be made from used flash bulbs. Since the bulbs turn white when they are used, it's easy to paint features on them using black paint. The socket end of the bulb will be too small to fit into a wax paper tube but you can fashion a made-to-measure cardboard collar.

Papier-mache is an old standby for puppet heads, and it is an ideal medium for older children. Attach a ball of crushed newspaper to a cardboard tube by means of paper strips and paste. By applying small, torn pieces of paper in layers like shingles, a head shape can be slowly built up. When the papier-mache becomes dried and hard, paint it skin color and add features to suit the character of the puppet. Wool yarn or shredded cloth glued into place makes an excellent wig.

Odd mittens from the rag bag can be turned into quick-and-easy hand puppets by sewing on faces made of felt, buttons and beads. A small hole in either side of the mitten, below the worked-on face, allows the puppeteer to use a finger and a thumb as "arms" while working the head itself with the remaining three fingers.

Worn socks make good puppets, too. They are especially good for dragons and other strange animals. The length of the sock covers the child's arm and a face is created in the sole. By using only the leg, heel and an inch or so of the sole, we

found we could create really amusing animals. By adding a red felt tongue, the heel becomes the mouth; and buttons or beads make eyes and nose. The curve of the heel can be manipulated with thumb and fingers to give the impression of an upper and lower jaw and makes a variety of facial expressions possible.

Small puppets, worked by strings, can be made from bean bags cut into rough body shapes. Attach strings to arms and head. When these strings are worked from above, the bean bags appear to walk and move.

All puppet heads need costumes. These can be held in place around the protruding part of the paper tube with either elastic bands or liquid cement. Puppet costumes are all the same shape—an oblong-shaped bag with two arms large enough for the puppeteer's finger and thumb.

MANY young children find the actual making of puppets extremely interesting. However, older children usually like to put their puppets to work. They re-create familiar fairy tales and then move on to original productions.

Once the first set of puppets is made, there's really no end to the puppet box. The youngsters will create new characters and new costumes. From there, they're likely to go on creating new scenery, new stage curtains, or even a more durable stage.

Even if their interest in puppets is short-lived, you'll find the puppet box especially useful when small voices pose the question: "Mom, what can we do now?"



These boys know that story telling or play-acting with puppets is real fun.

## Hands Up!

WORKWORN hands tell the story of loving attention to home and family. They don't have much time to be idle; but they can still be attractive. Here's how to keep your hands well-groomed.

1. Use lotion or hand cream nightly and any time after you've had your hands in water. Hands need lubrication to keep them smooth.
2. Dry your hands thoroughly. Wet hands will chap, particularly in cold weather.
3. Each time you dry your hands, try to remember to push the cuticle back with your thumb or the towel until the "half moons" show. This helps to keep the skin around nails from getting tight.
4. Clean under your nails every day, preferably with an orangestick.
5. Scrub your hands with a nail brush if they've been doing extra-dirty work.
6. Remove fruit or vegetable stains with lemon and salt, vinegar, or pumice stone.
7. Shape your nails to an oval with an emery board or nail file.
8. If you buff your nails, they'll shine without enamel. Use a chamois-covered buffer or the cushion of your hand.
9. If you use nail polish, you will find natural shades most suitable with casual clothes. And do have your polish all on or all off—no chipped polish. If you wash, rinse and thoroughly dry your hands before applying polish, you will find it stays on longer and looks smoother.

## Food Savers

STORE shelves offer today's homemaker a choice of food wrappings that is money saving in terms of food preservation and convenience of use. There are three basic types.

Waxed paper keeps food fresh by preserving moisture content. It is relatively inexpensive and useful when protection is needed for a short time.

Aluminum foil also protects food from loss of moisture and is a valuable cooking aid because it is not affected by high temperatures. Meat and fowl can be wrapped in foil to speed and improve the cooking process. Its cost does make it expensive to use as a general all-purpose household wrap.

Saran film is a transparent wrap that cannot stand exposure to direct heat. It does have a self-adhering quality that ensures a complete air- and moisture-proof seal. Because it is pliable, it acts like a second skin.

A supply of all three wraps is a worthwhile investment. Properly used, they pay for themselves many times over in housekeeping convenience and lowered food costs.

# The Country Boy and Girl

## Nakamun's Stories

by CLAIRE SHULER McKINNON



[Illustration by Annora Brown]

IN a family, or a tribe, each one has a part to play. Among the Indians, the women and girls did the work about the camp, while the men hunted or fought their tribal enemies.

Nakamun worked along with Yaada, her mother, and the other maidens. Even her brother, Nisku, was very proud of the beautiful moccasins she made for him from the skin of the deer, which she

decorated with colored porcupine quills.

But the Indian maidens did not always work. Sometimes they picked flowers, just as little white girls do. The Indians loved beautiful things, and told many interesting stories about them.

The story Nakamun liked best was the story of the rainbow.

One day when the little maidens picked flowers, Nakamun told them the story.

"The Great Spirit, the 'Gitchie Manitou' loved flowers, too," Nakamun said. "That is why he made the rainbow."

"But what have the flowers to do with the rainbow?" they asked, surprised. To them the rainbow didn't seem at all like the flowers they held in their hands.

"See how beautiful the flowers are," Nakamun answered, "and how many colors there are! But when we pick them, and hold them in our hands they soon die, for they are no longer close to the earth. And even the flowers we do not pick die when the cold winds of the winter blow and the snow lies deep upon the ground."

"Manitou loves the flowers, too, and he does not like to see them die,

so he has made the rainbow. After a rain, when the beautiful rainbow arches across the sky, you can see all the beautiful colors of the flowers . . . the rainbow is made of all the flowers that ever grow, for the Manitou put them in the sky so that they will not die."

"But how do you know this, Nakamun?" asked the others. "Who told you that story?"

"I've heard the storytellers tell it around the fire at night, sometimes," Nakamun answered. "I know that it is so, for the storytellers are old, and very wise, and know all things that have happened to our people since the world was new."

WHITE DEER, another maiden, suddenly exclaimed, "Oh, look! See, there is a beautiful yellow sunflower! I must pick it!" She ran to get it.

"Oh!" Nakamun stopped her. "You must not pick the sunflower, for it is the spirit of an Indian brave."

"Tell us, Nakamun, please!" the others begged. Nakamun told them this story, too.

"Many moons ago there was an Indian warrior who loved the sun more than anything else in the world. He thought the sun god was the most powerful of all the spirits, so he kept watching him. In the morning he would come out of his tipi and sit where he could see the sun, and as the sun traveled across the sky the

warrior moved around his tipi, so that he could always see the sun.

"When the warrior died, the Great Spirit remembered that he had loved the sun, so he put the warrior's spirit into a flower, the golden sunflower. And if you watch closely you will see that the sunflower always turns to face the sun, just as the warrior did so long ago."

"And that is why," Nakamun ended, "that you should not pick the sunflower, because it is the spirit of that Indian warrior." V

## Change a Letter

by MAUDE E. HALLMER

From the letters of each word, can you make another word that fits the definition?

1. LATE. A story.
2. SHOE. What you put on before you put on your shoes.
3. MUG. Something to chew.
4. DIET. The rise and fall of the ocean surface.
5. LAME. A man.
6. LIFE. A tool of hard steel.
7. CHARM. One of the months.
8. LAST. Seasoning for food.

### Answers:

- |         |          |
|---------|----------|
| 4. Tide | 8. Salt  |
| 3. Gum  | 7. March |
| 2. Hose | 6. File  |
| 1. Tale | 5. Male  |

## Young People

### On Proposing a Toast

MOST of us are more familiar with the edible toast eaten at the breakfast table than the spoken toast proposed at formal or informal banquets. Have you ever been asked to propose a toast? Do you know what a toast is? And if you were asked to propose one at a club gathering, could you do so?

The dictionary defines this second type of toast as a testimonial or compliment given in acknowledgment of gratitude, esteem or regard. In other words, a toast is a tribute.

It is a form of speech-making used on many occasions. For example, at the annual dinners of clubs, churches and other organizations, a toast to the group is quite appropriate. Other occasions for a toast are the dinner meetings which honor a person or a group. Daughters might propose a toast to their mothers at a mother-and-daughter banquet; and sons offer one at a father-and-son banquet. Special celebrations sometimes call for a toast to a distinguished guest or guests. And you may already be familiar with the toast that is, by custom, proposed to the Queen, or those offered at weddings.

#### Proposing a Toast

Short toasts are usually the most effective. If they're to be effective, they need the same care you normally give to a lengthier address. Remember too, they benefit from the use of suitable anecdotes, humorous stories or quotations pertinent to the moment. Here is a basic plan:

1. Acknowledge the chairman and the audience. Then explain the reason for the gathering.
2. Comment briefly on the achievements of the person or group being honored.
3. Offer your tribute on behalf of the group.
4. Propose the toast. This is done by lifting your glass and saying "Ladies and gentlemen, I ask you to rise, and drink with me a toast," naming the person or group. Wait for the audience to rise, then audibly repeat the name of the person or group.

If you propose a toast to some one person, that person remains seated. The same rule applies when the toast is made to mothers or fathers; the young people rise, their parents remain seated. If the toast

is to a club or some other organization, all who are present rise.

At some gatherings the toast to the Queen is proposed immediately after the National Anthem, before the audience is seated. Or it may follow the serving of the banquet main course. The form is the same. The chairman asks the guests to stand and drink a toast to Her Majesty the Queen. Its most simple form is:

Ladies and Gentlemen—The Queen.

Glasses should not be clinked; neither is it considered good manners for anyone to smoke until the toast to the Queen has been proposed.

#### Replying to a Toast

Once a toast has been proposed, it is necessary to make a reply. If you are called upon to perform this duty, there are two things to remember. First, offer a sincere thank you. Then tactfully return the compliments which were offered in the toast. The form of the reply follows this general pattern:

1. Acknowledge the person who proposed the toast.
2. Comment pleasantly on the sentiments expressed in the toast.

If you are given the honor of making the reply, remember that it should give the effect of a spontaneous speech. Still, it's wise to gather a few facts beforehand. You'll feel better able to cope if you know a little about the person who proposed the toast and the reasons for proposing it. And you'll likely get

some ideas to help you reply with grace and sincerity if you listen attentively to what is said.

By keeping these principles before you, you will find the spoken toast a more palatable duty than it seemed when you started out. V

## What Are You?

*Are you accursed by the burning thirst  
In your soul for the love of gold,  
Or are you vain from the love of fame  
With a heart that's stony cold?*

*Are you alive for yourself alone  
With never a fellow man,  
To claim as a friend to help you spend  
Your allotment of life's span?*

*Or are you a joy to those you know  
With a helping hand for all,  
Someone who'll fight for a world that's  
right*

*And watch oppressions fall?*

—W. R. McNEILL

## Blest

*When I glimpse laughter on a face  
Above a cruel, confining brace,  
Or hear gay words instead of sighs  
From smiling lips, 'neath sightless eyes,  
I stand up tall and really see  
The world my worries hid from me—  
Blue skies above the dingy street,  
Good earth beneath my sturdy feet—  
Then bow my head in grief and pain  
That I, so blest, dared to complain!*

—FRANCES GORMAN RISSE



## What Farm Organizations Are Doing

### CFA SEEKS CHANGE IN NATIONAL HOUSING ACT

The Canadian Federation of Agriculture, in representations to Public Works Minister David J. Walker, has suggested that special provision be made in the National Housing Act for construction of farm housing, and especially of second-dwelling accommodation for hired help on farms.

To obtain a loan for building a house under the Act at present, the CFA points out, the farmer must give to the Central Mortgage and Housing Corporation, or to the approved lender, a first mortgage on his entire farm. It is for this reason that the National Housing Act has had virtually no application in the farm housing field. Moreover, there is the additional problem for farmers of providing adequate housing accommodation for hired help on farms, where such help is regularly used, because this can be a major factor in determining whether a farmer is successful in employing competent labor on a permanent basis. This leaves the farmer in the position where he must bear responsibility for building and owning the housing of an employee, whereas the normal situation in our society is for employees to look after their own housing needs. The result is that, if employee housing is to be provided, an additional burden of capital cost is put on the owner of the farm.

With these considerations in mind, and in the hope that changes in the situation would lead to greater employment in the economy, the CFA suggested that the National Housing Act be amended to provide:

1. For the construction by a farmer of accommodation for employees on terms along the general lines provided for corporations in the mining, lumbering, logging and fishing industries as set forth in Section 17 of the present Act.

2. The farmer with the opportunity of building housing accommodation for himself without tying up his whole farm in a first mortgage.

In reply, the Hon. David A. Walker indicated that making a farm housing loan is different to that for a housing unit in an urban area, because the marketability of the urban house is ever so much greater than its farm counterpart. However, he assured the Federation that their representations would be borne in mind when further amendments to the Act are being considered. V

### MFA LOOKS TO A PRODUCER-CONTROLLED FARM POLICY

A policy statement approved at the annual meeting of the Manitoba Federation of Agriculture last month calls for steps to be taken to produce more effective planning, greater stabilization of prices and producer-controlled marketing of agricultural products.

The MFA took the position that price supports alone cannot satisfactorily solve inadequate monetary returns to farmers. Price support policy

should be designed to reduce price instability. To go beyond this point, to the extent of guaranteeing support prices at incentive levels, is to court government intervention in the form of production and price controls. The need, as the MFA sees it, is for farmers to accept more of the responsibility of directing production and marketing policies themselves.

"There must be a more imaginative self-help program in reducing production costs in agriculture, and the marketing costs of the products," the MFA said. To achieve this the organization called for more co-operative effort in the farm supply field, and the development of a combination of co-operative marketing and producer marketing boards. In this regard the MFA said, "Some control over production may be necessary by producers themselves. This, in the final analysis, is more desirable than government control to the extent of making agriculture almost a public utility. Research should be conducted on the most effective areas in which co-operative marketing or producer marketing boards should operate."

In addition, the MFA called for:

- The development of an independent research body to study the problems of agricultural marketing and farm policy.
- Wise tariff and trade policies on the part of the Federal Government to facilitate agricultural exports.
- Parity of living for farmers by the use of national revenue to shave some of the costs of rural development in return for the cheap food now being provided by farmers to the Canadian nation.

At the conclusion of the meeting, S. E. Ransom of Boissevain was re-elected president for his third term. Other members of the executive committee are vice-presidents D. A. McNabb, Minnedosa, and J. F. Warburton, Poplar Point, as well as Ralph Lowes of Brandon and Mrs. D. Thompson of Morden. V

### OFU PRESENTS VIEWS TO PROVINCIAL CABINET

The Ontario Farmers' Union made its annual submission to Premier Leslie M. Frost and the members of his Cabinet in January. The organization expressed grave concern with present conditions in the national economy, and in particular with the cost-price squeeze in which farmers find themselves.

"It is this cost-price squeeze that has driven thousands of farmers from the land and threatened to upset our economy," the OFU said. "Farmers to date have found themselves unable to cope with the situation. It is the responsibility of Government to do for people the things that people cannot do for themselves. Therefore, Government and farmers through joint action must find a solution to the problem," the brief concluded. The OFU urged that increased exports of farm products be encouraged, and that all measures be taken at once "to bolster our faltering economy."

The OFU deplored the practice of dividing farmers into groups, each group representing a specific agricultural commodity. Such a system it charged resulted in the more prosperous and aggressive organizations making policy and conducting their affairs without sufficient consideration for other segments of the agricultural industry, and often resulting in farm organizations working at cross-purposes.

"The present system," the OFU argued, "is not only inefficient and

ineffective, but is extremely expensive as well." Administration and marketing operations of Ontario's 17 commodity groups cost Ontario farmers \$3.7 million in 1959. The OFU recommended the complete reorganization of farm bodies into one general policy-making organization with a direct membership basis.

Turning to marketing boards, the OFU requested: (a) that regulations be changed so that officers must be elected within the area they represent; (b) that they not be permitted to hold office for more than 5 years; and (c) that a plebiscite be conducted on the hog marketing question not later than June 1961.

On community auction sales, the OFU suggested that consignors' names should be announced at such sales, and that the Ontario Department of Agriculture should hire weigh-scale operators at these sales.

Based on consumer complaints, the OFU asked for regulations which would make it compulsory for: (1) stores to offer vegetables in bulk as well as in packaged form; (2) country of origin to be stamped plainly and conspicuously on food products; and (3) that imported foods meet Canadian quality standards.

Other requests made by the Ontario Farmers' Union included the following:

- That an equitable milk pooling plan be devised.
- That a reduced truck license fee be introduced.
- That workmen's compensation rates for farmers be reduced.
- That a compulsory plan providing automobile insurance at cost be introduced.
- That the Ontario Health Insurance Plan be extended to include, in the family plan, students 19 to 21 years of age, and to cover convalescent and nursing homes, as well as

**CROWN BRAND**  
makes it better!



### HAM GLAZE

1 cup CROWN BRAND Corn Syrup  
1/2 cup water  
2 teaspoons vinegar

COMBINE CROWN BRAND Corn Syrup, water and vinegar.  
REMOVE skin from hot, cooked whole ham.  
SCORE fat and place a whole clove in center of each scored section.  
PLACE on rack in shallow pan.  
POUR CROWN BRAND mixture over surface of ham.  
BAKE in slow oven (325°F.) 1 hour basting frequently until browned.

QUICK HAM GLAZE:  
POUR CROWN BRAND Corn Syrup right out of the container over surface of ham.  
BAKE in hot oven (400°F.) about 10 minutes.  
REMOVE from oven; pour more CROWN BRAND over entire surface of ham.  
BAKE 5 to 10 minutes longer or until browned.  
ALL MEASUREMENTS ARE LEVEL

## What Farm Organizations Are Doing

clinical services on an out-patient basis.

• That an immediate study be made of the educational system to include these points: an equitable system of raising funds, and the need for trade, technical, vocational and agricultural schools. ✓

### SFU WANTS BILL OF RIGHTS FOR CO-OPERATIVES

The Saskatchewan Farmers' Union recommended that the Department of Co-operation and Co-operative Development sponsor a series of meetings to be staffed by representatives of the Department, the Co-operative Union of Saskatchewan and the SFU, when it presented its annual brief to Premier T. C. Douglas and his Cabinet last month.

In these meetings, the brief stated, "all available information should be presented on the proposed changes regarding vertical integration, restricted membership, credit and special privileges to selected members, responsibilities for management and policy-making bodies."

The SFU brief quoted from a report of a Committee of the Co-operative Union of Canada which advocates that a co-operative adopting a program of vertical integration must accept a "policy restricting its integrating programs to those members who are deemed qualified to participate." The CUC report advised that such a co-operative must have "highly competent and open-minded management." Presumably it would be for management to determine the qualifications and select members.

The SFU stated that a trend is developing toward the fusion of legislative and executive powers in the

co-operative movement. It believed the time had come to "define precisely the respective functions of management and policy-making bodies" in the co-operatives, and recommend that "separation of management and boards of directors be laid down in law to prevent co-op managers getting elected to boards of directors."

The new Co-operative Act should be a "Bill of Rights" for co-operators and co-operatives, the SFU declared.

The SFU brief also repeated requests that farmers be permitted to use purple gas in their trucks; that the fee for hunting licenses be increased by one dollar and the proceeds used to increase compensation to farmers for wildlife damage; and that the government work toward the establishment of a veterinary college in Western Canada.

The SFU also urged the Saskatchewan Government to institute a public works program for able-bodied citizens; that it build new treatment and training centers to meet the needs of the mentally retarded; that it build a separate women's prison; that it give consideration to the establishment of a hostel where women prisoners may stay at the conclusion of sentences until employment is available. ✓

### OFA TO HELP IN HOG MARKETING

Agreement was reached last month between the Ontario Federation of Agriculture and the Ontario Hog Producers Marketing Board to have a special OFA committee named to sit in on future discussions between the hog marketing organization and the Ontario Farm Products Marketing Board.

It was generally thought that an OFA Committee might be of help in finding some solution to the hog marketing problem. Named to the OFA Committee were William Tilden, OFA president; A. H. K. Musgrove and Charles Huffman, OFA vice-presidents, and R. A. Stewart, an OFA governor. ✓

### CFA'S HANNAM COMMENTS ON NEW LEGISLATION

H. H. Hannam, president of the Canadian Federation of Agriculture, says farmers are now faced with a major challenge to their imagination, and an opportunity for taking the initiative. He was referring to the resolution presented in the House of Commons by the Minister of Agriculture, the Hon. Alvin Hamilton, authorizing the introduction of Federal Agricultural Rehabilitation and Development Legislation.

The new legislation is most welcome, Mr. Hannam said, and is necessary as a long-term policy measure to meet some aspects of the farm problem—particularly the problem of low income, uneconomic units. While it is not a panacea, Mr. Hannam said the legislation would open broad opportunities for action in the fields of soil and water conservation, land use development, and rural economic development in general. It is essentially enabling legislation, Mr. Hannam said, and if passed it will be up to farmers as well as provincial governments to see it is used effectively and extensively. He called on farmers across the country to start looking at and studying their problems, since centers of action for most programs under the legislation are going to be in the districts and communities of the agricultural regions of the nation. ✓

*Continued from page 12*

### WANT EMERGENCY HELP

cream and cheese producers. Paying of the subsidy to the fluid milk shipper on his surplus would tend to increase production and, hence, the marketing problem. Others argued that the pricing policy should not discriminate against the fluid milk shipper. The latter view prevailed. The policy statement contains the recommendation that the present policy of 25 cents per 100 lb. stabilization payment to the producer be continued and, further, that it be paid on all milk going into manufacturing channels regardless of its source.

**Skim Milk Powder.** Agreement was reached to again request the Federal Government to purchase, at the right moments, large enough quantities of this product at prices high enough to stabilize the market for it. A similar request was made a year ago but was turned down.

**Whole Milk Powder.** Spokesmen at the meeting commended the Federal Government for its actions in purchasing some 20 million pounds of whole milk powder in 1960 as a means of reducing butter and skim milk powder production, and in subsidizing the export of whole milk

powder at the rate of 4 cents per lb. The delegate body agreed to request the Government to continue this purchase program and to increase the export subsidy to 6 cents a pound.

### OTHER OBJECTIVES

**D**AIRY Farmers of Canada agreed to work toward three other objectives:

1. They would accelerate their efforts in association with other interested groups to develop a national school milk program. Canada, it was pointed out, is the only progressive nation in the Western World where such a program does not now exist.

2. They would attempt to obtain full research information into the solids-not-fat content of milk, correlate such information, and recommend standards, regulations and practices relating to the optimum solids-not-fat content of fluid milk.

3. They would urge provincial authorities to pass legislation making it compulsory for all skim milk powder to be graded. At present, grading of this product is required for export and interprovincial trade only. Dairy Farmers of Canada also want powder graded when manufactured and sold within a province. ✓

### Berries Are Family Tradition



[Guide photo] Bert supervises Logan picking at his Saanichton farm, Vancouver Island

**B**ERRY growing is a Bickford family tradition. When Bert Bickford was 16 years old, the family moved from a strawberry farm in Cornwall, England, to southern Vancouver Island, where their father started growing strawberries. One by one, Bert and his four brothers followed their parent into the berry business. For years all six farmed within a 4-mile circle of one another in Central Saanich, near Victoria.

Bert is a long-time president of the Saanich Fruit Growers' Association, which handles the bulk of the small fruits produced in that area. The main crops are strawberries and loganberries. At the present time, the Association is shipping about five carloads of fresh logans to the Prairies each season, as well as freezing some 85 tons for distribution during the winter. The rest of the loganberries go to a local winery.

The limiting factor in Saanich's berry industry is the availability of irrigation water. However, growers have greatly improved the situation by making storage dugouts.—C.V.F. ✓

## Farmer's Wife: who said Love, Honour - and Go Without?

Many a farmer's wife is "going without" because her husband is still using expensive harvest methods.

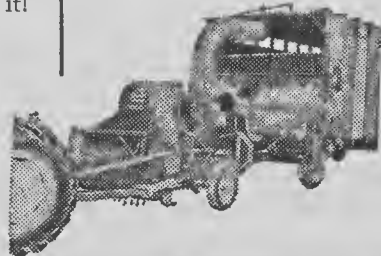
The money spent on twine, extra help, and silo filling would buy one major household appliance every year, and leave money over!

The surest and quickest way to get these modern conveniences is to cut out unnecessary farm expenses.

Mrs. Farmer, isn't it time you got busy and checked up on the time-saving, labour-saving, money-saving, McKee One-Man Shredder Harvester?

Drop a line to Head Office or your nearest distributor for free descriptive folder—and leave it where your husband is sure to see it!

- ONE machine loads in the field, unloads at the barn.
- ONE tractor is all that's required.
- ONE man can fill his silo, single-handed.
- ONE man, alone, can harvest 20 tons of hay a day
- ONE man can direct cut grass and haul to the cows.
- ONE man can haul swathed grain from the field.
- ONE man can pick up and store combined straw.



**McKEE BROS. LIMITED** ELMIRA ONTARIO

**ALBERTA**  
McKee Harvester (Alberta) Ltd.  
5112 - 47th St., Red Deer Phone 4133

**SASKATCHEWAN**  
Ronald McCrostie, 1730 Alberta Ave.  
Saskatoon Oliver 2-1414

**MANITOBA**  
McKee Harvesting Systems Limited  
Elm Creek Phone 99

**QUEBEC AND MARITIMES**  
McKee Harvesters (Eastern) Limited  
Box 173, Chateauguay, Que. Oxford 2-9431

# Letters

## Next 10 Years in Agriculture

So the wise men have been "Looking into the Crystal Ball." After reading that most interesting article in your December issue, I have more than a suspicion that the ball was very cloudy in spots.

One of the wise men suggested the farm boys growing up today can look forward to a 5-day week. Why should the city have any attractions for them under such circumstances? But I must admit that although I have farmed for many years, I've never yet had an animal sophisticated enough to lay off and call it a day when I happened to get home late at night. So I can only hope that some of these gentlemen have in mind night schools to train the animals of the future. It will either have to be that or mechanical cows.

I noticed that Mr. Tilden thinks that the farmers of the future will specialize—they have got to cut out being a jack-of-all-trades and master of none. This may be sound advice, but we have also been warned against putting all our eggs into one basket. During my farming experience, I have followed the latter advice and have found that what I lose on the swings I make up on the roundabouts. In farming one thing ties into another. A specialist when he does lose out takes a bad beating.

Now Mr. Musgrove thinks that future farmers will become so efficient that they will be able to feed the whole world. Until he said that, I thought we were already too efficient for our own good. All I can hope is that the Indians of India don't take him at his word. They are increasing at about 8 million a year right now. If they ever get the idea that unlimited amounts of grub are going to be poured into their country, the population will really explode.

There were many more interesting subjects discussed, but I suppose even an editor has only so much patience, so I'll close now.

J. W. GALLenkAMP,  
Bashaw, Alta.

## Marketing Legislation

Without attempting to criticize or evaluate the Ontario Farm Products Marketing Act, we think the following question should be raised. Can the administrative and judicial powers of a Board be combined so that the Board can deal impartially with all problems?

The most authoritative opinion on this matter that we are aware of is in the 1947 Royal Commission on milk, where Dalton G. Wells, a justice of the Supreme Court of Ontario, states: "In my view, it is quite impossible to fairly combine powers of bureaucratic administration with those of a judicial nature in the same person with any hope of dealing impartially with the subject's rights."

The question of the administration of justice has been further complicated by the Farm Products Market-

ing Board expressing opinions against the Ontario Hog Producers' Marketing Board. At this point we do not either condemn or approve the actions of the Ontario Hog Producers' Marketing Board or the opinions about them expressed by the Farm Products Marketing Board. We merely state that the Farm Products Marketing Board has repeatedly expressed such opinions, completely unconnected with a judicial ruling

following a dispute between producers and processors. Under these circumstances such opinions fall into the category of public relations or propaganda.

Without, in any way, at this time, condemning or approving the opinions expressed by the Farm Products Marketing Board we submit a second question. Can the administrative and judicial powers of a Board be combined with each other, and with public relations or propaganda, in such a way that the Board can deal impartially with all problems?

The Farm Products Marketing Board has recently amended regulations which in effect will force some method of auction selling of hogs, or some hidden ("open") auction method.

This poses other questions, the third one being: Has the Farm Products Marketing Board any grounds, within the confines of natural justice, for changing such basic regulations, except as a ruling after a hearing, brought about by a dispute between the producers and processors?

And a fourth one: Has the Farm Products Marketing Board any

# Big Scale Poultry Farming Demands FLEXIBLE DISEASE CONTROL

Spruceleigh Farms at Brantford, Ontario, are in the hatchery business in a big way. With 85,000 broiler chicks on hand, an outbreak of disease could result in high mortality.

In June 1960, cold, wet weather caused an epidemic of sniffles, one that could have become serious without immediate treatment. Ordinarily, the regular dosage of AUREOMYCIN in feed would have been sufficient, but some of the chicks were off their feed, there was some mortality, and the whole flock needed a fast antibiotic boost.

Farm manager Howard Schultz put 60,000 chicks on AUREOMYCIN SOLUBLE. This easy drinking water method gave him complete control of dosage. He was able to give the right birds enough AUREOMYCIN to get them out of their slump, and the flexible SOLUBLE method

made sure that even the ones that were off their feed got treatment. The result? The flock was soon back to normal with no complications.

Naturally they've been passing the good word about AUREOMYCIN along to their customers. Woodman Bros. in Cainsville make a practice of putting AUREOMYCIN in feed during one week per month, and during the stress of vaccination or hot weather.

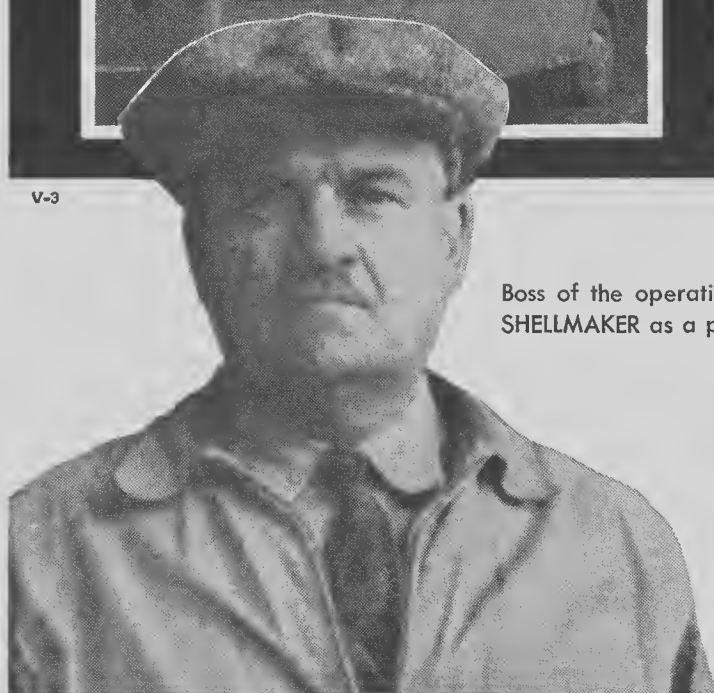
Another customer, cleaned up an outbreak of Bluecomb with one shot of AUREOMYCIN in the feed. Generally, owners of smaller flocks keep a bag of feed containing AUREOMYCIN on hand for easy treatment, while larger operators with big flocks on bulk feed find SOLUBLE to be a faster, more flexible treatment for their purposes.

In the poultry business, on any scale, Cyanamid products lead the way to bigger profits.



V-3

Spruceleigh Farms run a large feed mill operation.



Boss of the operation is Mr. Howard Schultz. He also recommends AERO SHELLMAKER as a positive safeguard against soft-shelled eggs.

CYANAMID

CYANAMID OF CANADA LIMITED  
MONTREAL 2, QUEBEC

AUREOMYCIN



DISEASE CONTROL



## LETTERS

grounds, within the confines of natural justice, for changing the regulations without first outlining in detail the objections to the present method from the producer viewpoint?

For us laymen, it seems quite obvious that, if the processors object, the proper procedure for changing regulations should be an open hearing, called for at the request of the processors, and at which they must prove their point. It is a cardinal rule of British justice that one is innocent until proven guilty.

We are not aware of any significant official public complaints by either producers or processors against the Ontario Hog Producers' Marketing Board; yet a dispute obviously exists!

Thus, our fifth question: Has the Farm Products Marketing Board become one of the parties of the dispute rather than the judge of the dispute?

It is the producers' belief, backed by sound economic reasoning, that auction selling of a highly perishable product increases the opportunity for collusion.

Thus, our last question: How does the Farm Products Marketing Board reconcile their change of regulations with our anti-combine laws?

And a last note: If the opportunities for collusion under auction selling are used, and it would not be consistent with business practice for them to be ignored, the Farm Products Marketing Board will be in the unenviable position of restricting the economic freedom of the producer!

*Signed by:*

ROBERT G. GOOD, sec.-treas., Milk Co-op of Brant District, director of F.A.M.E.; LEONARD LAVENTURE, executive director, O.F.A., director of F.A.M.E.; REV. DOUGLAS BRYDON, Mount Forest; S. C. BRUBACHER, Ayr; H. D. GHENT, past president, Co-operative Union of Ont.; ANDREW LEISHMAN, past president, Ontario Cream Producers; BRUCE INNES, secretary, Norwich District Co-op.; ALSTON CAMPBELL, 1st vice-president, Ontario Plowmen's Association.

### Foxtail Warning

The following incident may be hard to believe, but I assure you it happened. I thought it might be a good idea to pass a brief account of it along, because we see far too much ripe foxtail in many pastures.

My son's neighbor had a yearling calf that was in poor shape and not eating. My son purchased the calf for a nominal sum and took it to a local veterinarian. Medicine was administered, and it was noted that the jaws and tongue of the calf were covered with small ulcers. The animal ate a bit for a short while, then stopped eating and eventually died. A post-mortem showed that the calf's stomach contained a big bunch of ripe foxtail.

"A READER,"  
Ponoka, Alta.

### Canadian Farmers Abroad

Having recently returned from a most interesting visit to Scotland and England as members of the "Canadian Farmers Abroad" tour, we wish to express some of our reactions. The tour was sponsored jointly by the Scottish Farmers, the National Farmers' Union of England, Canadian Pacific Railways and the Canadian Federation of Agriculture. All 40 members of the tour were greatly impressed with the efficiency with which it was conducted.

The intensified methods of handling the soil and the breeding of cattle and sheep left the group with a favorable impression. The beauty of the countryside, with the neat green fields and stone fences, will be a lasting memory. . . The wonderfully warm reception of the British farmers is something never to be forgotten.

The placard on the bus read: "Canadian Farmers Abroad." Everyone we passed had a cheery smile and a wave of the hand for us. Farmers came to our hotel in the evening to extend greetings.

Could such a tour be the answer to some of our human relations problems? We think so. We made many, many friends. We hope the sponsoring organization will endeavor to continue this project.

MR. AND MRS. W. SCHROTER,  
Bremner, Alta., and  
MRS. R. J. DORWARD,  
Edmonton, Alta.

### Whither Canadians?

The January issue has an illustration of a farmer at Teulon who works 8 hours a day at a hosiery plant, and still runs his grain and beef farm. Another illustration depicts girls from neighboring farms working in a head-wear factory. And yet the farmers are waiting for markets for their products, while preventing the unemployed from finding a job.

As a retired farmer, I know that stock-raising is a full-time job. In my 50 years in Canada, with the exception of 8 years as a lumber yard manager, I left the farming to the farmer.

Farmers today have to take a job in the city or town to supplement their business. Then all our factory workers should acquire a farm to supplement their wages. Otherwise, they will have to take a lower standard of living.

What has happened to the former independence of our pioneer Canadian farmers? Whither Canadians?

ERNEST H. TUDOR,  
Morningside, Alta.

### Start of Hog Grading

In 1920, I was lured to act as a clerk at the Kingston Fair for the Holstein and swine judge.

The cattle were of a high standard, and I learned more about Holsteins in those few days than I had in my whole previous life.

The hogs were in a different category. There were only half a dozen in the bacon class and they ranged from 125 to about 400 pounds. The judge did not like this situation. A discussion ensued on what constituted a good bacon type hog. He came up with the suggestion that it

should be a long hog weighing from 175 to 190 pounds. He included this in his report to the Kingston Fair Board.

It was not long after this that I saw this type of hog included in the market quotations. This was the start of hog grading.

J.K.L.,  
900 Garnet St.,  
Regina, Sask.

### Inflation the Problem

I have to salute you on your editorial "New Feed Mill Regulations." The more regulations there are, the worse the economy will be.

But as for your editorial on "Incredible Politics" I cannot quite agree. It is true that the Conservatives are not quite as bad as the Liberals, but in general we are governed by stupidity and ignorance. The masses of our population are at least 90 per cent ignorant of the economy. The same percentage of our Members of Parliament must also be ignorant, because they come from the masses. The same is true of the Government.

Now, I think it is not very important what action is taken to better the farmers' lot by Mr. Diefenbaker or anyone else. The problems will not be solved by only hand-outs. Any doctor who fights the symptoms of a disease and disregards the basic cause would be considered a poor doctor. The root of all our economic evils is inflation, and as long as the cause of inflation is not stopped, there can be no cure. . .

Against stupidity and ignorance even the gods struggle in vain.

WILLIAM FABRIZ,  
Dapp, Alta.

### Weather Forecast

I have long thought what a waste of space the weather forecast is in your valuable monthly. Previous and present weather conditions have proved how unreliable it is. As a general rule the forecast blankets the Prairie Provinces with much the same conditions. As I see it, each province has its own distinct weather pattern. The Province of Alberta itself has about four weather zones as far as I can make out. Even so, the day to day forecasters get fooled.

I think the page given over to the weather forecast could be put to a far more useful purpose.

SIDNEY GATES,  
Highway P.O., Alta.

### Off the Cuff

I sincerely appreciate your Guide, especially the weather forecast. It is amazing how accurate it is when studied a bit. Also thanks for your coverage of Farm Union activities. I feel sure the Union is much nearer the needs of farmers than the Federation of Agriculture. They have just been keeping the farmers quiet for the last 20 years.

G. L. DAVIDSON,  
Dunedin, Ont.

### Test Water

Your article on poisonous water ponds in June or July saved us a lot of cattle last summer in a community pasture. I would like to see it reprinted this year to warn others of this danger.

W. SWANSON,  
Milk River, Alta.

## Make Window Shelves

by C. RAYMOND

**Y**OUR house plants will benefit from summer sun if they are placed in decorative, easy-to-make window shelves.

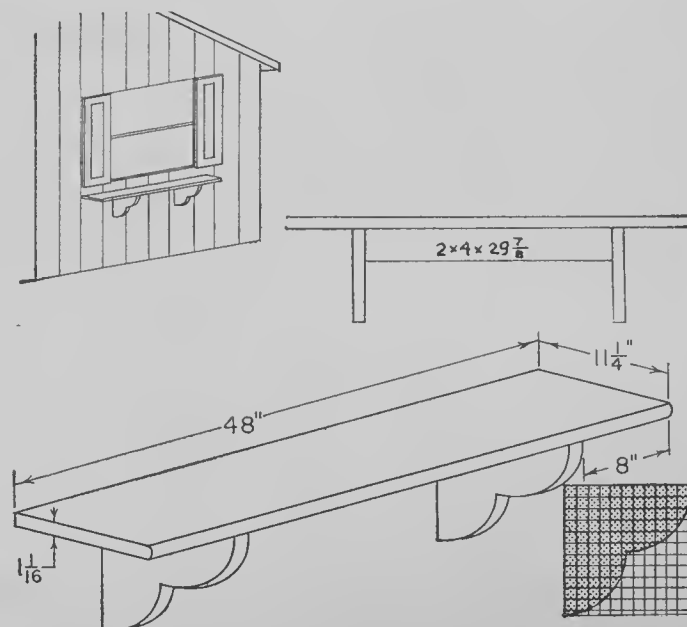
Each shelf is made of a piece of stepping, 48" long, with one rounded or "nosed" edge. Round the two ends by rasping and sanding to match the nosed edge.

For the braces, make two squares 11¼" by 11¼", and lay off a grid of

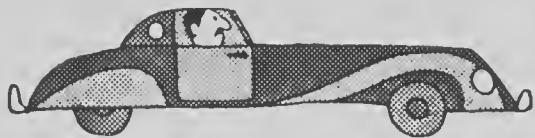
1" squares, as shown in the drawing. Copy the curved pattern of the braces in pencil. Cut out the braces with a jig saw or coping saw. With a rasp and sandpaper, smooth the curves and round the sharp edges.

Attach the braces 8" from each end of the shelf, using three No. 10 flat-head wood screws, 2" long, at each joint.

Then cut a piece of 2" by 4" lumber to fit between the braces. Fasten the 2" by 4" to the building wall with the 4" face against the wall. Then fasten the shelf board snugly against the wall and the 2" by 4", using 2" screws.

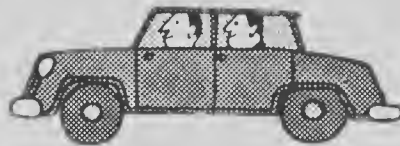


Now that there are small small cars



and big small cars

and small big cars



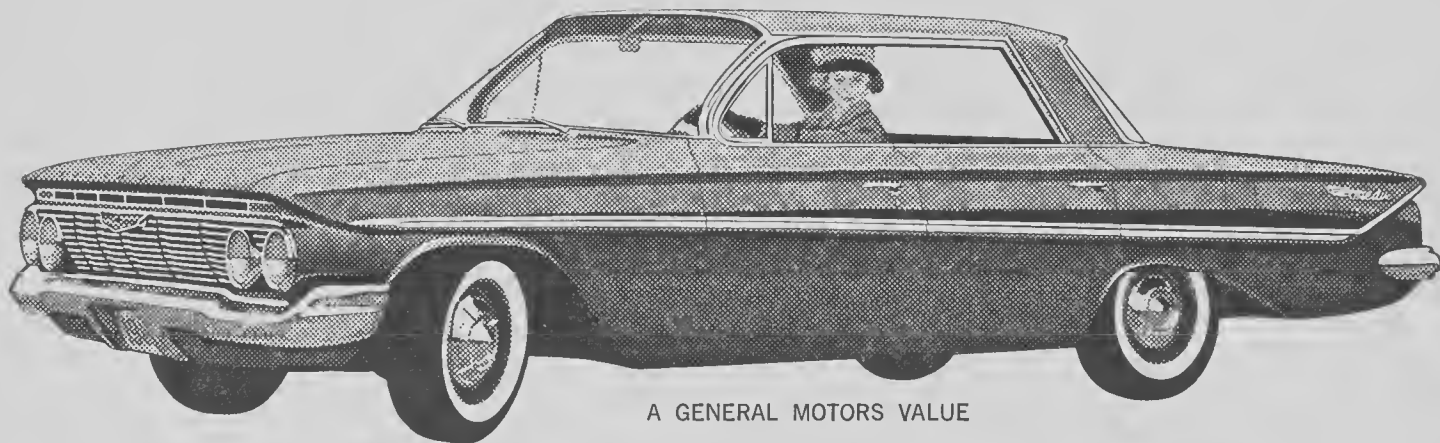
and BIG BIG cars,

just in case



you're confused,

take a look at an unusually normal automobile,



A GENERAL MOTORS VALUE

THE '61 CHEVROLET. It's roomy,



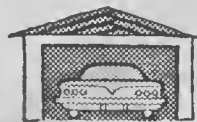
it's luxurious,



it's thrifty.



It's just the right size



to go in your garage!

The one with the girl in it is the Chevrolet. A Bel Air Sport Sedan. Trim, very tastefully styled. Not so big that driving is a chore, nor so small that it puts the squeeze on comfort. Sort of a just-right automobile, from its parkable size to its remarkable

room. Luxuriously Jet-smooth and whisper-quiet on the road; yet thoroughly practical where you want Chevrolet's thrifty no-nonsense practicality. So "normal" there's not another car quite like it.

*Whitewall tires optional at extra cost.*

**SEE A WHOLE SLEW OF THEM AT YOUR CHEVROLET DEALER'S ONE-STOP SHOPPING CENTRE**

*See the new Chevrolets and Chevy Corvairs at your local authorized Chevrolet dealer's*



# Their Planning Proved to Be Good Business

by J. P. HUDSON

Department of Agricultural Economics and Farm Management, University of Manitoba.

A FARM business never stands still for long. It goes ahead or it goes backwards. The rate at which new developments in science and technology are accepted by farmers influence the rate of financial progress of a farm. Farmers who keep abreast of new ideas and who can measure the effect of their acceptance upon their income are more likely to be going ahead than those who have no accurate measurement to guide them in their decisions.

The high cost of modern farming demands more careful planning than in the past. Mistakes in judgment can be very costly. A well managed farm business is one where the operator has a confident knowledge of the performance of each phase of his operations. He anticipates closely the effect of each major decision he makes. The speed at which he makes a decision is dependent upon the confidence he has in his knowledge. His confidence is strongest if he knows the capabilities of his business

and can base his decisions upon sound business principles.

The accompanying table presents average figures taken from the farm records of the charter members of the Carman District Farm Business Association of Manitoba for the 3-year period 1957-59. The figures were chosen to show the amount and rate of change which has taken place on the farms.

It is apparent that there has been a significant increase in livestock numbers and in the level of capital investment. Credit as a source of capital has increased. More money is spent operating the farm now than formerly. The sale of farm products has increased.

The increase in *net income* suggests that there was a need to adjust the farm business. The rate of change suggests that the farmers had confidence in their decisions. These were prompted by their knowledge of the capabilities of their business, obtained from their records and accounts. V

Adjustment in the Farm Business and Rate of Adjustment, 1957-1959

ITEM	Jan. 1, 1957	Dec. 31, 1959	% Increase
Number of Acres in Farm .....	531	558	5
Number of farms with cattle .....	56	52	
Average size of cattle herd .....	31	40	29
Number of farms with hogs .....	32	31	
Average size of hog herd .....	19	58	205
Number of farms with poultry .....	36	27	
Average size of poultry flocks .....	204	1,103	441
Amount of Farm Capital .....	\$43,374	\$51,705	19
Real Estate .....	22,497	25,171	12
Improvements .....	9,013	11,253	25
Machinery .....	9,770	12,431	27
Livestock .....	4,207	6,403	52
Amount of Borrowed Capital .....	7,118	11,307	59
Farm Receipts .....	11,742	16,332	39
Cash Operating Cost .....	6,920	9,689	40
Net Farm Cash Income .....	4,822	6,643	38

## Wild Oat Control by Cultivation

DELAYED seeding and cultivation are still very important methods of controlling wild oats. N. A. Korven of the Swift Current Experimental Farm, reports that the main points in control, based on farm tests, are as follows:

- Disk stubble lightly after harvest for good emergence of wild oats the following spring.

- Till adequately during summer-fallow period to destroy all wild oat plants that emerge—a cultivator or disker followed by a rodweeder will be satisfactory in most years. Make sure that the wild oats produce no viable seed.

- Delay seeding, allowing wild oats to emerge first. A good tillage and/or seeding operation that destroys the weeds is essential. It is also important to produce a good stand of grain to compete strongly with wild oat seedlings. Flax is a poor competitor.

- Use post-seeding tillage, preferably with a rodweeder, to destroy wild oats missed during seeding. If using a rodweeder, seed with a disker or hoe drill at sufficient depth to allow the rod to work above the seed. Rodweeding has been done as late as 10 days after seeding without excessive damage to grain, and wild oat control has been good.

If these practices are followed, you can reduce wild oat infestation by about 70 to 90 per cent. V



Hi Folks:

Anybody who sticks up a bank just to get money has holes in his head. That's about as risky as trying to make money on a farm. If it's money you're after, there are all kinds of polite ways to rob people that're much easier than that.

The other day the door latch of our 12-year-old fridge finally gave up after threatening to do so for some time. We HAD to do something now because the door wouldn't shut at all.

Looking things over, I could see the whole door would have to come apart. The screws were the silly kind which need a special screwdriver. Somebody invented them just to confuse people who try to do their own repairs.

"I'll see if I can get a repair man out today," I told Sara as I headed for town. "We might even need a new lock."

The dealer shook his head when I suggested my door catch might be repaired.

"They're complicated things—once they go they're GONE," he said kindly. "But you're in luck. It just happens I have one door lock left that'll fit your model. I keep it around as a sort of curio to show folks how they made things in those days."

I had a hunch this was his way of reproaching me for letting my fridge get so out of date.

"Let's see now," he calculated, "we'd have to take your door off, which would mean two men. Those

doors are heavy and the insulation spills out if you don't handle 'em right."

"Just tell me how much," I said with sinking heart.

"Thirty for the new lock and thirty for labor," he said briskly. "That'll be sixty dollars all told."

A few years ago I would've fainted on the spot, but you get hardened to this kind of thing. If we farmers could pile charges on our hogs and labor like that we'd all be millionaires.

"Of course," he went on, "if you don't want to spend that much on an old fridge, you COULD buy a new one. Trouble is, I couldn't allow you much on something that doesn't work."

"I'll think about it," I said. On my way out of his store I saw one of those funny screwdriver sets.

"How much?" I asked casually.

"Eighty-five cents," he told me, a trifle ashamed to mention such a trifling sum.

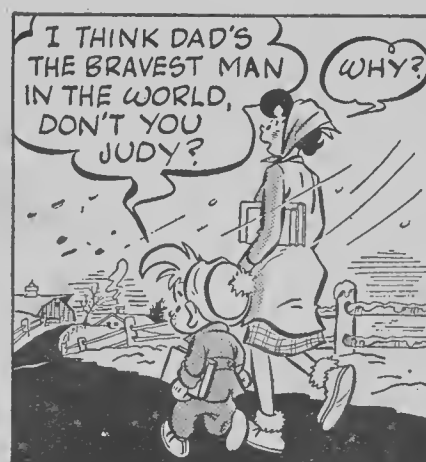
"Sold," said I. "I've always wanted to own one of those sets."

Back home, my youngest boy and I took the fridge door apart. It was as simple as going broke. No insulation spilled out because it was one big solid sheet. Inside the door, a shaft which worked the latch had slipped out of its bearing. It only took a second or two for me to bend it back.

Sincerely,  
PETE WILLIAMS.

## THE TILLERS

by JIM ZILVERBERG





## Our Readers Suggest

In freezing weather prevent cold fingers by hanging small items such as handkerchiefs, wash cloths and socks on wire coat hangers before taking them outdoors. Then you can hang them quickly on the line by slipping the hook through used rubber roller rings looped over the line. The rubber ring prevents slipping along the line. — Mrs. Chas. Hill, Parkhill, Ont.

Hang chenille spreads or rugs wrong side out to dry so that the tufted surfaces rub together. This fluffs them up and makes them look like new. — D. E. Fisher, Dorchester, N.B.

Cut a sponge to fit the bottom of a flower pot. It absorbs water better than gravel and keeps the dirt from coming out. — Gladys Bowdler, Elmhurst, Sask.

I use a salt shaker full of sugar to sprinkle the tops of sugar cookies. The sugar sprinkles on evenly and really takes half the time. — Mrs. Verna Abramson, Bawlf, Alta.

I buy 1 lb. packages of shortening, and divide the pound in four equal parts. This makes each piece four ounces ( $\frac{1}{2}$  cup), which is the amount called for in most cake recipes. This saves trying to get shortening out of a cup. — Mrs. Blair Outhouse, Tiverton, N.S.

When making a cake or cookies, measure the dry ingredients, then the shortening, milk and beaten eggs. Thus, one measuring cup does in place of two. — Mrs. J. B. Slimmon, Heward, Sask.

When making dumplings, dip the spoon in the hot liquid each time before scooping up the batter. The batter will drop neatly from the dipped spoon.

Store bacon fat drippings in paper cups. When drippings are used, throw the cup away. This saves washing.

Worn cuffs on the legs of children's snowsuits and storm cuffs on sleeves of jackets and windbreakers can be replaced with the tops of worn out woolen socks. Often the tops of socks outwear the feet. — Mrs. M. Dixon, Grande Prairie, Alta.

If you have a stovepipe drip on the floor or oilcloth, cover with butter-milk. It will wash off almost at once. Stained fabrics may be soaked in buttermilk before washing and the stovepipe drip will come out. — Mrs. Edgar Wittman, Cargill, Ont.

To loosen greasy film from your oven, place  $\frac{1}{2}$  cup of household ammonia in the oven and let stand overnight. This will make cleaning spill-over much easier too. — Miss A.H., Man.

Will you share your household hints? We will pay \$1.00 for each suggestion accepted for publication. Address them to Readers Suggest, The Country Guide, 1760 Ellice Ave., Winnipeg 21, Man.



Four fine-textured layers of rich chocolate cake alternating with cool, peppermint-flavored whipped cream. And using the one-bowl method it's surprisingly easy! Bake it with Magic, serve it with pride!

### CHOCOLATE MINT DREAM CAKE

Sift together into a bowl

2 c. once-sifted  
pastry flour  
or  $1\frac{2}{3}$  c. once-sifted  
all-purpose flour  
3 tsps. Magic  
Baking Powder  
 $\frac{3}{4}$  tsp. salt  
 $1\frac{1}{2}$  c. fine  
granulated sugar  
 $\frac{1}{2}$  c. cocoa

Add  
 $\frac{2}{3}$  c. soft shortening  
1 c. milk  
1 tsp. vanilla

Beat 300 strokes with wooden spoon or 2 mins. with electric mixer set at medium speed.

Add  
2 eggs  
and beat another 150 strokes or 1 min. Turn into 2 greased 8" round layer cake pans, lined in the bottom with greased waxed paper. Bake in a mod. oven  $350^{\circ}$ , 35 to 40 mins. Stand on wire racks for 10 mins. Turn out, peel off paper and allow cakes to cool completely.

Split cold layers horizontally. Put layers together again with filling and topping of Peppermint Whipped Cream Filling. Decorate with curls of chocolate.

Yield: about 10 servings.

**Peppermint Whipped Cream Filling.** Beat 1 pt. ( $2\frac{1}{2}$  c.) whipping cream until softly stiff. Add and beat in  $\frac{1}{3}$  c. icing sugar and  $\frac{1}{2}$  tsp. peppermint extract. Tint delicately with green food coloring.

Another fine product of  
STANDARD BRANDS LIMITED



# "I made it myself — with Magic!"



# NOW! ROBIN HOOD ALL - PURPOSE FLOUR IS PRE - SIFTED!

So you sift just once,  
before measuring, for  
cakes and pastries...  
never sift at all  
for breads  
and yeast doughs!

How do you improve a flour that's already as good as flour can be? You don't change a single thing about it. You just do one more thing to it: SIFT IT. And that's what Robin Hood have done. This marvellous All-Purpose Flour is SIFTED FOR YOU . . . right at the mill.

**Better baking results!** Thousands of women tested it for us. They said "wonderful results!" Yeast breads—breads, buns, rolls—were finer-textured, more tender. Loaves were crustier, browned more evenly. Some folks claimed they had higher-rising dough than ever before!

**Cakes and pastries:** Sift just once, before measuring. For all your recipes not using yeast, sift flour just once before measuring. Then sift together the measured flour and other dry ingredients, according to your recipe.

**Same fine flour as always**—same bag and label—but "PRE-SIFTED" now—and guaranteed best results or your money back plus 10%. Bake wonderful things with less work? Sure you could with Robin Hood!

## FLOUR MEASUREMENT TABLE

For Bread and Yeast Dough Recipes

Robin Hood "PRE-SIFTED" Flour measures more compactly than sifted flour. As a result, you need less of it. So for yeast recipes calling for sifted flour, just measure Robin Hood Flour as it comes from the bag, according to this table:

Robin Hood "Pre-Sifted" Flour	Sifted Flour
Use 1 1/4 cups . . . . . IN PLACE OF . . . . .	2 cups
2 1/4 . . . . .	3
3 1/4 . . . . .	4
4 1/4 . . . . .	5
5 1/4 . . . . .	6
6 1/4 . . . . .	7
7 1/4 . . . . .	8
8 . . . . .	9
9 . . . . .	10
10 . . . . .	11
10 3/4 . . . . .	12
14 1/2 . . . . .	16
18 . . . . .	20
21 1/2 . . . . .	24

Do not use the measurement table for cakes and pastries.

© COPYRIGHT 1961



Sure  
you could  
with  
Robin Hood